



42E14SW0004 2.13579 LAPIERRE LAKE

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2.13579

1990 SUMMARY REPORT

THE RESULTS OF AN INTEGRATED EXPLORATION PROGRAM
(GEOLOGICAL MAPPING, LITHOGEOCHEMICAL SAMPLING,
GROUND GEOPHYSICS, AND POWER STRIPPING/TRENCHING)
ON THE MISSING LINK PROPERTY
(CLAIMS TB907550 et al)
LAPIERRE AND LEGAULT TOWNSHIPS
THUNDER BAY MINING DIVISION
ONTARIO

RECEIVED

SEP 10 1990

MINING LANDS SECTION

NTS: 42E\14
LATITUDE: 49 45'N
LONGITUDE: 87 24'W
OWNER: HOMESTAKE MINERAL DEVELOPMENT COMPANY
OPERATOR: HOMESTAKE MINERAL DEVELOPMENT COMPANY
DATE: SEPTEMBER, 1990
AUTHOR: DUNCAN MCIVOR



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1. SUMMARY AND RECOMMENDATIONS

The Missing Link property is located 12 kilometres northeast of the town of Jellicoe, in north-central Ontario. The property is comprised of 54 contiguous, unpatented mining claims, located in Lapierre and Legault Townships, of the Thunder Bay Mining Division.

The property straddles the Paint Lake Fault/Deformation Zone, a regional transcurrent structure that separates the Onaman-Tashota Terrain to the north, and Beardmore-Geraldton Terrain to the south.

The Onaman-Tashota Terrain, which underlies most of the property, is predominantly comprised of calc alkalic to tholeiitic metavolcanics. The Beardmore-Geraldton Terrain is a metavolcanic -metasedimentary assemblage within which lithologic units have been tectonically transposed into thin alternating slices.

Prior to acquisition of the property by HMDC in early 1990, the property had seen only limited surface work. The property was held by Golden Earth Resources during the period 1986 to 1989, who completed an airborne magnetics and VLF-EM survey, and some limited ground geophysics over those portions of the property covered by water. The vendor, Mr. Nolan Cox, completed a stripping/trenching program over portions of the ground in 1989.

During the 1990 field season, HMDC completed a program of line-cutting, detailed geological mapping, lithogeochemical sampling, and ground magnetic and VLF-EM surveys over the entire property. A power stripping program was also completed, at 9 target locations. Detailed geological mapping and channel sampling of the stripped areas completed Homestake's initial program on the property.

The results of the geological mapping indicated that the property was underlain predominantly by intermediate to mafic metavolcanics, locally intruded by conformable, sill like gabbroic bodies. Within the mafic volcanics were distinct strongly magnetic flow horizons, that defined the generally east-west trend of the stratigraphy. Varying degrees of shearing within the mafic metavolcanics resulted in the use of descriptive field terms that are associated more with tuffaceous and

epiclastic rocks, though true sediments are not thought to constitute a significant proportion of the stratigraphy. Also intercalated within the mafic metavolcanics are interformational exhalative horizons. The presence of these horizons, not observed in outcrop, is based on interpretation of the ground geophysical data, which defined several strong, long strike length VLF-EM anomalies, often with associated magnetic signatures. The horizons are thought to be massive pyrite/graphitic argillite interflow sediments, or, in the case of the coincident mag - VLF-EM anomalies, chert-pyrrhotite/magnetite exhalatives.

A major contact with sediments of the Beardmore-Geraldton terrain is interpreted as crossing the southern portion of the property, beneath Jory Lake. Polymictic paraconglomerates of the Beardmore-Geraldton belt were observed in outcrop south of the lake, and the contact is interpreted based on the airborne magnetic data.

The mapping also defined, within the mafic metavolcanics, two distinct zones of intense shearing and associated hydrothermal alteration, to an assemblage of Fe carbonate, sericite, and chlorite. The zones, up to 25 metres in width, and strike lengths in excess of 1000 metres, are thought to reflect an anastomosing shear system that may be the Paint Lake Fault itself, or a related subsidiary splay. These zones became the focus of the exploration program. Initial lithogeochemical sampling of the zones, where exposed, was disappointing, with only 5 of 49 samples collected returning anomalous gold values in excess of 50 ppb. The best initial assay of 1.968 gpt was returned from a sample of arsenopyrite bearing quartz vein blast rock proximal to an old pit within the shear.

Despite the initial poor analytical results, the setting of the property, and in particular the shear/alteration zones proximal to the interpreted major Paint Lake Fault System, is analogous to the Brookbank Deposit, thirty kilometres to the west (1.3 MT at 0.30 OPT). Given the poor exposure along the strike length of the shear, a stripping program was designed to better evaluate the system at several locations along its strike length.

The program, comprised of 121 hours of backhoe work, and an additional 16.5 days of outcrop washing, targeted 9 areas, 3 as major clearing programs, and 6 as thin, strip type trenches

across target zones. Over the extensively cleared areas, detailed 1:100 scale geological mapping, and extensive rock saw channel sampling programs were completed (325 samples).

At Stripped Area 1, a broad shear/alteration zone, to 25 metres in width, is exposed over 130 metres of strike length. Within the shear zone are several thin, contorted to brecciated quartz and quartz - Fe carbonate veins, carrying variable amounts of pyrite and arsenopyrite mineralization. Analytical results from the detailed channel sampling program were poor, with only 7 of 180 samples returning significantly elevated gold values of >500 ppb. Best results came from a 3 metre wide quartz - carbonate stockwork zone, which carried 1.22 gpt/3.0 metres, including 2.06 gpt/1.0 metres.

Stripped Areas 2, 3, 4, and 6 also exposed the shear/alteration system along strike, though no significantly elevated gold values (>500 ppb) were returned from the channel sampling programs at these locations. The results of all sampling to date, then, indicate a very sporadic, and low grade gold content hosted within secondary veining within the shear system. Again, however, the analogy to the Brookbank Deposit holds, in that surface sampling there returned only low grade and sporadic gold values, and ore was not encountered within the shear system until drilling began to probe beneath the 800 foot level.

A 1500 metre, eight hole diamond drilling program is therefore proposed for the 1991 fiscal year, to evaluate the shear systems defined on the property at depth and along strike, as well as secondary geophysical targets. Specific collar locations are outlined below.

DDH ML-91-01

COLLAR: L5+00E, 10+00S

AZIMUTH: 0 DEGREES

DIP: -45 DEGREES

DEPTH: 200 METRES

TARGET: The first of a two hole fence designed to test the contact between the paraconglomerates to the south, and mafic metavolcanics to the north, a zone interpreted as being a major fault and potential sight of significant hydrothermal alteration and associated gold mineralization. This hole will also test a weak VLF-EM anomaly in the vicinity of the interpreted contact.

DDH ML-91-02

COLLAR: L5+00E, 8+70S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 200 METRES
TARGET: The second hole of the two hole fence, as outlined above.

DDH ML-91-03

COLLAR: L6+00E, 2+50S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 300 METRES
TARGET: This hole is designed to test the down dip extensions of two parallel shear/alteration zones defined by surface mapping, in the vicinity of surface channel samples to 2.06 gpt/1.0 metres. The hole will also penetrate a strong VLF-EM anomaly, thought to be a massive pyrite horizon.

DDH ML-91-04

COLLAR: L11+00E, 1+50S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 140 METRES
TARGET: This hole is the first of a two hole fence designed to test the eastern strike extension of the two parallel shear/alteration zones encountered during surface mapping, 500 metres to the west.

DDH ML-91-05

COLLAR: L11+00E, 0+50S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 140 METRES
TARGET: This hole is the second of the two hole fence, designed to test the target described above.

DDH ML-91-06

COLLAR: L19+00E, 5+25S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 180 METRES
TARGET: This hole is designed to test a strong coincident magnetics\VLF-EM anomaly thought to be a chert-pyrrhotite/magnetite exhalative horizon. It is the first of a three hole fence testing the stratigraphy in an area of stacked, repetitive anomalies that may be the result of local complex folding.

DDH ML-91-07

COLLAR: L19+00E, 4+00S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 200 METRES
TARGET: This hole is designed to test two moderate VLF-EM anomalies, with an associated magnetic response, that are thought to reflect a folded chert-pyrrhotite/magnetite exhalative horizon. It is the second of a three hole fence crossing the stratigraphy in an area interpreted as having been folded.

DDH ML-91-08

COLLAR: L19+00E, 2+75S
AZIMUTH: 0 DEGREES
DIP: -45 DEGREES
DEPTH: 140 METRES
TARGET: The third hole in a three hole fence, designed to test a strong VLF-EM/magnetics anomaly in an area of inferred folding.

Total anticipated costs for the 1500 metre diamond drilling program are approximately \$150,000.

2. INTRODUCTION

2.1 SCOPE OF REPORT

This report serves to summarize the results of the 1990 exploration program carried out by Homestake Mineral Development Company on the Missing Link property.

2.2 LOCATION, AREA, AND ACCESS

The Missing Link property is located approximately 12 kilometres northeast of the town of Jellicoe, midway between the communities of Beardmore and Geraldton, in north central Ontario (see Figures 1 and 2).

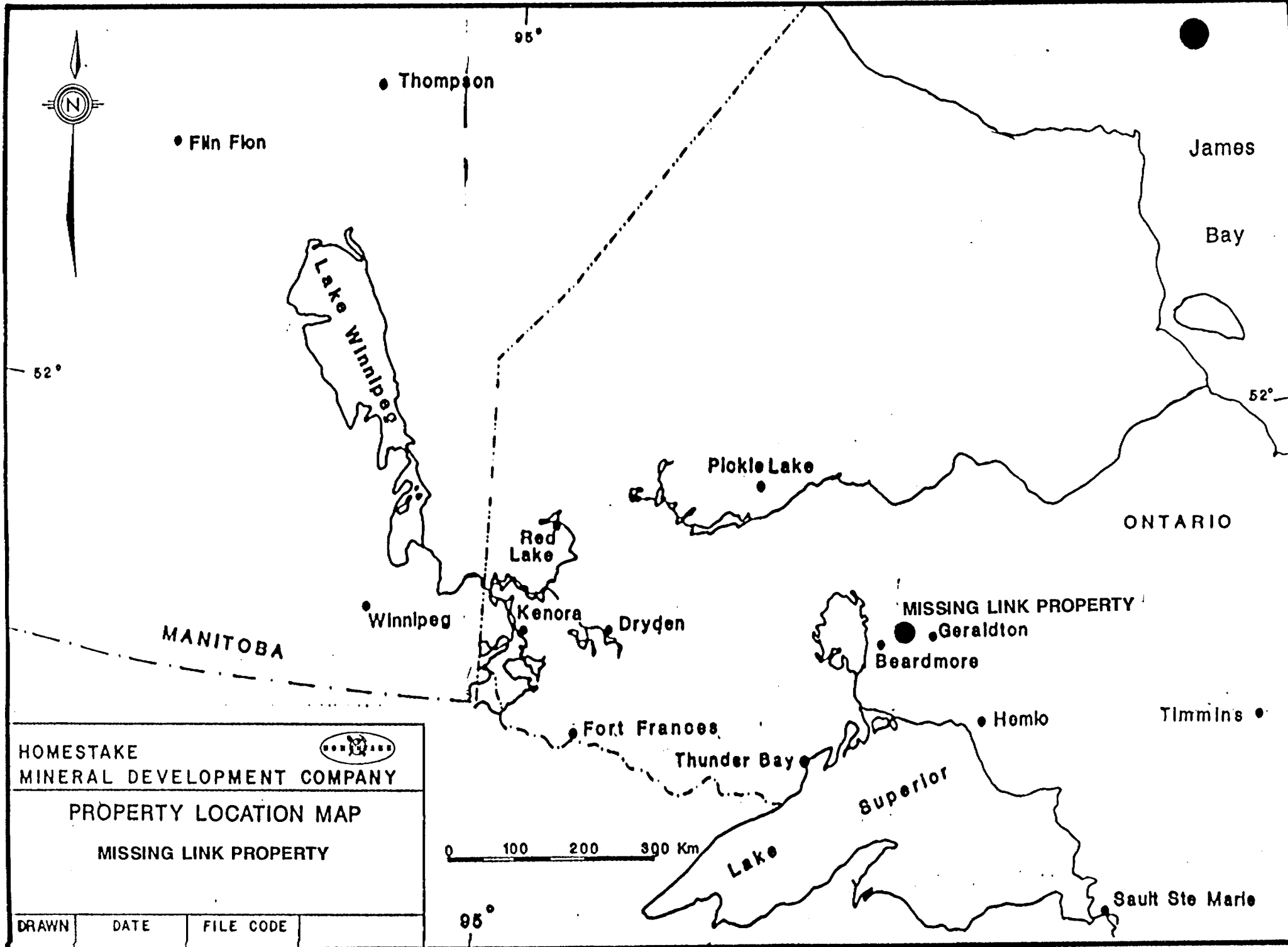
Access to the property is via the all weather gravel Kinghorn Road, which extends north from the Trans Canada Highway 11, at a point approximately 7 kilometres east of Jellicoe. The Kinghorn road crosses the western edge of the property, approximately 10 kilometres north of the Highway 11 turn off. From the Kinghorn road, a 4WD bush road extends east through the south central portion of the property, providing reasonable access to most portions of the ground.

The property is one of low relief, rarely exceeding ten metres. The majority of the claim block is covered by spruce swamp, underlain by a thick exotic glacial till and outwash assemblage known as the Wildgoose Glaciofluvial Complex. Outcrop exposure is limited to a broad, east - west trending ridge that crosses the south central portion of the claim block, and where locally the glacial sediment cover is less than 3 metres.

Two large lakes, Jory in the south, and an un-named lake in the east-central portion of the property, cover approximately 15% of the claim block. Three smaller, un-named lakes straddle the western edge of the property.

2.3 PROPERTY DEFINITION

The Missing Link property is comprised of 54 unpatented mining claims, all located within Lapierre and Legault Townships of the Thunder Bay Mining Division. Outlined below is a summary of the claim status, including the work filed for assessment credit summarized in this report.



HOMESTAKE
MINERAL DEVELOPMENT COMPANY



PROPERTY LOCATION MAP

MISSING LINK PROPERTY

DRAWN	DATE	FILE CODE

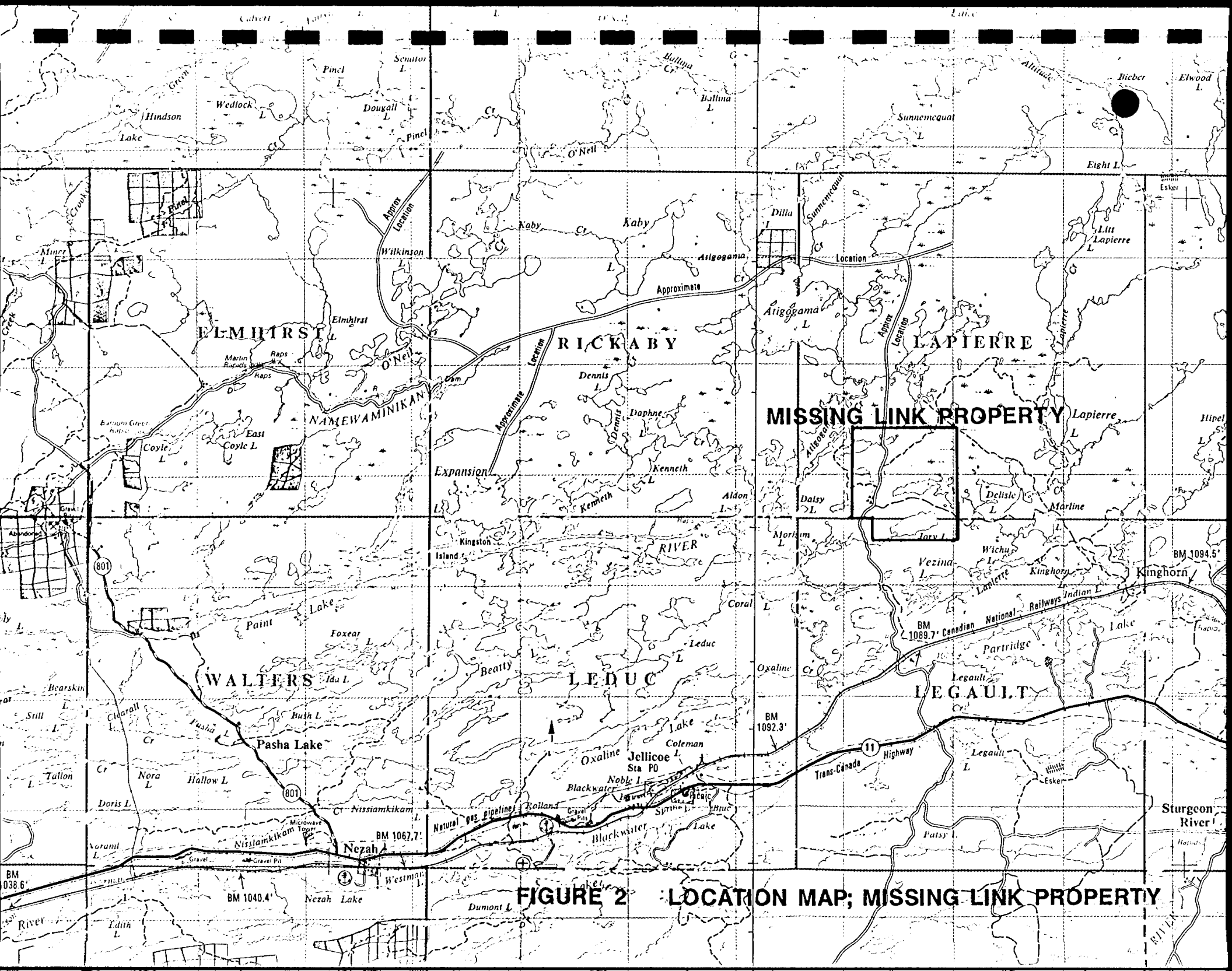


FIGURE 2 LOCATION MAP; MISSING LINK PROPERTY

CLAIM STATUS
MISSING LINK PROPERTY

CLAIM	REC. DATE.	ASSESSMENT CREDITS					TOT.	EXPIRY DATE
		GPHY.	GEOL.	GCH.	DR.	EXP.		
907485	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907486	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907487	MAY 20,86	80	40	0	0	33.52	153.52	MAY 20,91
907488	MAY 20,90	80	40	0	0	43.52	163.52	MAY 20,91
907489	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907490	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907491	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907492	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907493	MAY 20,86	80	40	0	0	43.52	163.52	MAY 20,91
907494	MAY 20,86	80	40	0	0	53.52	173.78	MAY 20,91
907495	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907496	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907500	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907507	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907508	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907509	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907510	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907511	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907512	MAY 20,86	80	40	0	0	33.52	153.52	MAY 20,91
907513	MAY 20,86	80	40	0	0	38.52	158.52	MAY 20,91
907514	MAY 20,86	80	40	0	0	43.52	163.52	MAY 20,91
907515	MAY 20,86	80	40	0	0	43.52	163.52	MAY 20,91
907550	MAY 20,86	80	40	0	0	100.00	220.00	MAY 20,92
907851	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907852	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907853	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907854	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907855	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907856	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907857	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907858	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907859	MAY 20,86	80	40	0	0	43.52	163.52	MAY 20,91
907860	MAY 20,86	80	40	0	0	90.52	210.52	MAY 20,92
907861	MAY 20,86	80	40	0	0	95.52	215.52	MAY 20,92
907862	MAY 20,86	80	40	0	0	85.52	205.52	MAY 20,92

CLAIM	REC. DATE	ASSESSMENT CREDITS						EXPIRY DATE
		GPHY.	GEOL.	GCH.	DR.	EXP.	TOT.	
907867	MAY 20,86	80	40	0	0	90.52	210.52	MAY 20,92
907868	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907869	MAY 20,86	80	40	0	0	43.52	163.52	MAY 20,91
907870	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907871	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907872	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907873	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907875	MAY 20,86	80	40	0	0	80.74	200.74	MAY 20,92
907876	MAY 20,86	80	40	0	0	99.32	219.32	MAY 20,92
907877	MAY 20,86	80	40	0	0	90.52	210.52	MAY 20,92
907878	MAY 20,86	80	40	0	0	85.52	205.52	MAY 20,92
907879	MAY 20,86	80	40	0	0	99.52	219.52	MAY 20,92
907880	MAY 20,86	80	40	0	0	33.52	153.52	MAY 20,91
907881	MAY 20,86	80	40	0	0	28.52	148.52	MAY 20,91
907882	MAY 20,86	80	40	0	0	100.00	220.00	MAY 20,92
907883	MAY 20,86	80	40	0	0	99.52	219.52	MAY 20,92
907884	MAY 20,86	80	40	0	0	23.52	143.52	MAY 20,91
907885	MAY 20,86	80	40	0	0	43.52	163.52	MAY 20,91
907890	MAY 20,86	80	40	0	0	55.52	175.52	MAY 20,91

* Note that credits listed as greater than 200 man days are in anticipation of Notices of Reduced Assessment Credit for geological mapping on partially water covered claims. This Claim Status Summary will be updated upon acceptance of all filed work.

Figure 3 illustrates the locations of the claims that comprise the property.

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

MISSING LINK PROPERTY

CLAIM LOCATION MAP

DRAWN
SES

DATE
01/90

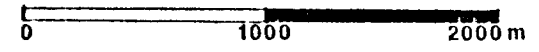
FILE CODE

Revised _____



CKABY TWP.

EDUC TWP.



907867	907868	907869	907870	907871	907872	907873
907515	907508	907507	907485	907490	907491	907496
907514	907509	907510	907486	907489	907492	907495
907513	907512	907511	907487	907488	907493	907494
907550	907852	907853	907856	907857	907860	907861
907500	907851	907854	907855	907858	907859	907862
907875	907878	907879	907882	907883	907885	
907876						
	907877	907880	907881	907884	907890	

LAPIERRE TWP.

DELISLE

LAKE

JORY LAKE

LEGAULT TWP.

2.4 REGIONAL GEOLOGIC SETTING

The following description of the general geology of the area comes predominantly from Mason and White (1986), to which the reader is referred for an excellent overview of the geology and gold deposits of the Beardmore - Geraldton area.

The area has been geologically subdivided into two belts; the southern Beardmore - Geraldton belt, and the northern Onaman - Tashota belt. The belts are separated by a regional, transcurrent fault/deformation zone, known as the Paint Lake Deformation Zone (PLDZ), and are differentiated on the basis lithology, structural style, and age.

The PLDZ is an east - west trending lineament, approximately 50 kilometres in length, and up to 1 kilometre in width, comprised of an early ductile component termed the Paint Lake Shear Zone, and a late brittle component known as the Paint Lake Fault (Reilly, 1988). Movement along the PLDZ was in a dextral sense, consisting of an early differential motion with south side down, and a later strike slip motion.

The southernmost Beardmore - Geraldton belt is situated within an east - west trending isoclinally folded metavolcanic - metasedimentary sequence, within which lithologic units have been tectonically transposed into a series of thin alternating slices. The belt has been divided lithologically into: the Southern Metavolcanic Sub-belt, and the Southern Metasedimentary Sub-belt.

The Southern Metavolcanic Sub-belt is comprised predominantly of massive, pillowed, amygdaloidal and variolitic magnesian to iron tholeiitic flows. Intercalated with these flows are thin tuffaceous equivalents, as well as thin clastic and chemical metasediments. Regional foliations are 075 to 090 degrees, dipping vertically to steeply north.

The Southern Metasedimentary Sub-belt is comprised of interbedded clastic and chemical metasediments, predominantly wackes, conglomerates, siltstones, and oxide facies (magnetite - hematite) iron formations. Isoclinal and tight drag folding have affected much of the sedimentary sequence, and fold structures generally plunge to the west at 30 to 40 degrees.

The northern Onaman - Tashoda Metavolcanic Belt is comprised predominantly of calc-alkalic to tholeiitic felsic to mafic metavolcanics. These rocks have been deformed into arcuate shapes by the emplacement of several intervening granitic intrusions. Regional fault structures, and much of the stratigraphy, trend north and northeasterly.

Gabbro, diorite, granodiorite, quartz-diorite, monzonite, feldspar porphyry, and quartz-feldspar porphyry intrude rocks of both the Onaman - Tashoda Belt and Beardmore - Geraldton Belt. Late Precambrian diabase intrudes all rock types. Metamorphic grade throughout both belts is generally greenschist, but locally ranges to amphibolite facies, usually proximal to large granitoid intrusions.

The general setting of the two belts described above suggests that the Beardmore - Geraldton Belt is an accretionary prism of repetitive sequences of northward younging basaltic volcanic rocks, and predominantly clastic marine sedimentary rocks, which is developed on the southern margin of an early Archean volcanic arc complex (the Onaman - Tashoda Belt). The two terrains can be equated with and are part of the Wabigoon Sub-province to the north, and the Quetico Sub-province to the south, again separated by the regional Paint Lake Deformation Zone. Figures 4 through 7 illustrate the general geology of the Beardmore - Geraldton area, as well as schematic illustrations of belt formation.

2.5 GOLD DEPOSITS OF THE BEARDMORE - GERALDTON AREA

The Beardmore - Geraldton gold camp ranks among the top five gold producing regions of the Canadian Shield, with approximately 4.12 million ounces of production from 19 mines over the past 55 years.

The following summary of styles of gold mineralization is adapted from Mason and White (1986), and Burk (1989).

Gold mineralization within the camp can be classified according to stratigraphic location, and host lithology.

1. Southern Volcanic Sub-belt, Beardmore - Geraldton Belt

As previously discussed, this sub-belt consists of massive,

pillowed, and amygdaloidal and variolitic magnesian and tholeiitic flows. The flows are intercalated with thin but stratigraphically continuous oxide facies iron formations, comprised of chert, magnetite, iron carbonate, and iron amphibole bands. The sub-belt is separated from adjacent metasedimentary packages by the Empire Fault in the north, and the Blackwater River Fault.

A) Mafic volcanic host rock (Northern Empire Mine, Spooner Prospect, McWilliams - Beardmore Prospect, Buffalo - Beardmore Prospect, Pichette and Maki East Occurrences).

The Northern Empire Mine (located 1.5 kilometres northeast of Beardmore), produced 149,500 ounces of gold from 1934 to 1941, at an average grade of 0.35 OPT. It is to date the only gold producer from the Southern Metavolcanic Sub-belt. The deposit consists of a 0.6 metre (average width), boudinaged quartz-carbonate vein hosted within a 1 to 3 metre wide shear zone in mafic metavolcanics. Gold is associated with arsenopyrite, pyrite, chalcopyrite, and galena. The chlorite-carbonate wallrock marginal to the vein, while often carrying appreciable sulphide concentrations, carry no significant gold values.

B) Iron formation host rock (Craskie-Vega Prospect, Delbridge, Maki Main, and Lattimer Occurrences).

Gold mineralization is associated with two persistent east-west trending chert-magnetite-carbonate iron formations in Vincent Township. The sub-parallel iron formations, stratigraphically approximately 40 metres apart, have been traced for strike lengths of 600 metres, and average 2 metres in width. The iron formations are hosted within strongly sheared and variably altered mafic flow rocks. Gold is associated with arsenopyrite, pyrite, pyrrhotite, and chalcopyrite bearing discordant quartz veins cutting the iron formation, as well as sulphide replacement bands of the iron rich amphiboles within the iron formation. Average grade at the Craskie-Vega prospect is 0.19 OPT\Au over 2.0 metres, though tonnages defined to date are uneconomic.

2. Southern Metasedimentary Sub-belt, Beardmore - Geraldton Belt.

As discussed, this belt is comprised predominantly of clastic

metasediments, primarily feldspathic wackes and argillites, and polymictic conglomerate, which tends to occur near the northern margin, or stratigraphic top of the sedimentary sequence. Interbedded with the clastic metasediments are oxide facies iron formations. In the Beardmore area, the sub-belt is bounded by the Watson Lake Fault to the north, and the Empire Fault to the south. In the Geraldton area, The Bankfield - Tombill Fault, and Little Long Lac Fault, are the two most prominent structures within the sub-belt, and bound all gold deposits in the Geraldton area. The majority of gold production from the Beardmore - Geraldton camp has come from the Southern Metasedimentary Sub-belt.

A) Clastic metasediment host rocks (Leitch, Sand River, Little Long Lac, Magnet Consolidated, Hard Rock, and Jellicoe Mines).

Lithologies generally found on these mine properties are interbedded wackes, arkosic sandstone, argillite, and minor conglomerate. Iron formation is typically interbedded with the clastic metasediments, approaching widths of 25 metres. Narrow sill-like bodies of diorite and feldspar porphyry are also commonly present. Ore consists of sheeted fissure - type quartz veins rarely exceeding 0.5 metres in width, with associated carbonate, pyrite, arsenopyrite, scheelite, tourmaline, chalcopyrite and sphalerite. Wallrocks (generally feldspathic wackes) are variably sheared and altered, to an assemblage of sericite, carbonate, and locally silica, over widths rarely greater than 1 to 2 metres. The ore zones appear to be spatially and probably genetically related to tight isoclinal drag folds, plunging 30 to 40 degrees to the west, proximal to regional transcurrent faults (eg. Bankfield-Tombill, Little Long Lac, Watson Lake Faults).

B) Iron formation host rock (Hardrock Mine, MacCleod-Cockshutt Mine, Soloman's Pillars Prospect).

The most significant production from an iron formation host in the camp comes from the North Zone of the Hardrock Mine. This orebody is located within a westerly plunging Z shaped drag fold on the north limb of a tight isoclinal fold. Mineralization consists of quartz-carbonate-sulphide veins localized by shearing, and quartz-carbonate-sulphide replacement bands within the chert-magnetite iron formation. Sulphides present include

pyrite, arsenopyrite, pyrrhotite, chalcopyrite, and sphalerite. Pervasive iron carbonate alteration is associated with the ore zone.

The Soloman's Pillars Prospect, located 7 kilometres west of Jellicoe, consists of quartz-pyrite-arsenopyrite veins that cut and replace chert-magnetite iron formation near the northern margin of the Southern Metasedimentary Sub-belt. The deposit is less than 300 metre from the regional Watson Lake Fault, to which the mineralization is probably genetically related.

C) Felsic intrusive-metasediment contact hosted mineralization (Bankfield, Hardrock, MacCleod-Cockshutt, Consolidated Mosher Mines).

One of the largest orebodies in the Beardmore - Geraldton Camp is the F Zone of the MacCleod -Cockshutt and Consolidated Mosher Mines. The deposit, located along an albite porphyry - metasediment contact, contained approximately 10 million tons at an average grade of 0.15 OPT Au. The zone consists of a quartz vein stockwork within a wide, 100 degree trending, steeply dipping intensely fractured and sheared horizon in wackes and lean iron formation, along the north limb of a tightly folded albite porphyry body. The ore zone follows the plunging nose of the porphyry, at 30 degrees west. Gold occurs in quartz veins and fractures with associated pyrite and arsenopyrite mineralization, in variably carbonatized and sericitized wacke. Where the veins pass into iron formation, sulphide replacement of magnetite becomes the most prevalent ore type.

At the Bankfield Mine, Approximately 10 kilometres northwest of the MacCleod-Cockshutt Mine, mineralization consists of sheared and brecciated wacke and albite porphyry, impregnated by silica, pyrite, arsenopyrite, and pyrrhotite. The orebody sits in a flexure or roll along the northern margin of the west-northwest trending albite porphyry body. The Bankfield-Tombill Fault passes less than 500 metres north of the orebody, to which the deposit is probably genetically related.

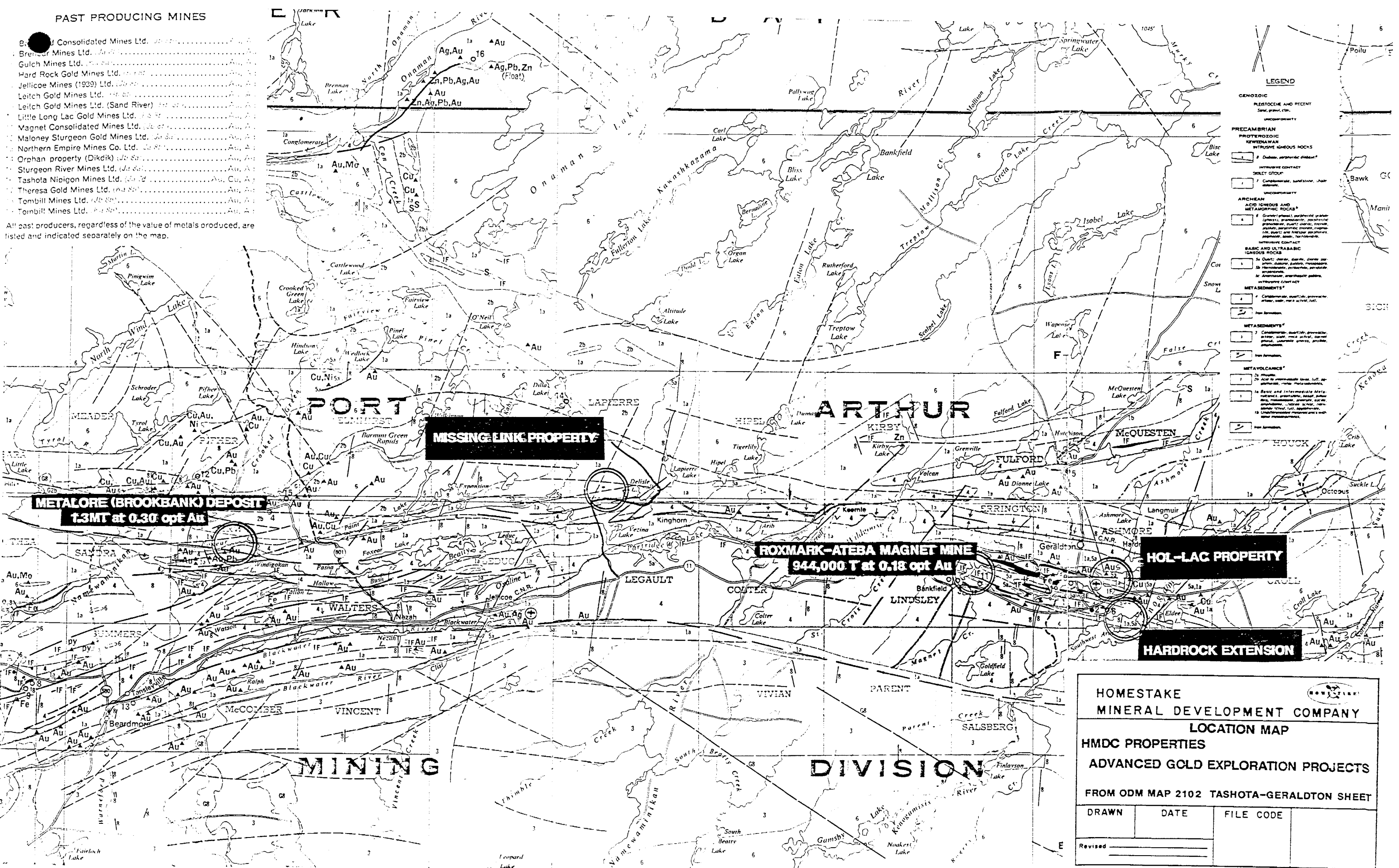
D) Regional transcurrent fault/shear zone hosted mineralization (Brookbank, Cherbourg Deposits, Metalore Resources)

At the Brookbank and Cherbourg deposits, currently being explored

PAST PRODUCING MINES

- Barrick Consolidated Mines Ltd. Au
- Brecon Mines Ltd. Au
- Gulch Mines Ltd. Au
- Hard Rock Gold Mines Ltd. Au
- Jellicoe Mines (1939) Ltd. Au
- Leitch Gold Mines Ltd. Au
- Leitch Gold Mines Ltd. (Sand River) Au
- Little Long Lac Gold Mines Ltd. Au
- Magnet Consolidated Mines Ltd. Au
- Maloney Sturgeon Gold Mines Ltd. Au
- Northern Empire Mines Co. Ltd. Au
- Orphan property (Dikdik) Au
- Sturgeon River Mines Ltd. Au
- Tashota Nipigon Mines Ltd. Au, Cu, Ag
- Theresa Gold Mines Ltd. Au
- Tombill Mines Ltd. Au
- Tombill Mines Ltd. Au

All past producers, regardless of the value of metals produced, are listed and indicated separately on the map.



MISSING LINK PROPERTY

METALORE (BROOKBANK) DEPOSIT
1.3MT at 0.30 opt Au

ROXMARK-ATEBA MAGNET MINE
944,000 T at 0.18 opt Au

HOL-LAC PROPERTY

HARDROCK EXTENSION

HOMESTAKE MINERAL DEVELOPMENT COMPANY

LOCATION MAP

HMDC PROPERTIES

ADVANCED GOLD EXPLORATION PROJECTS

FROM ODM MAP 2102 TASHOTA-GERALDTON SHEET

DRAWN	DATE	FILE CODE

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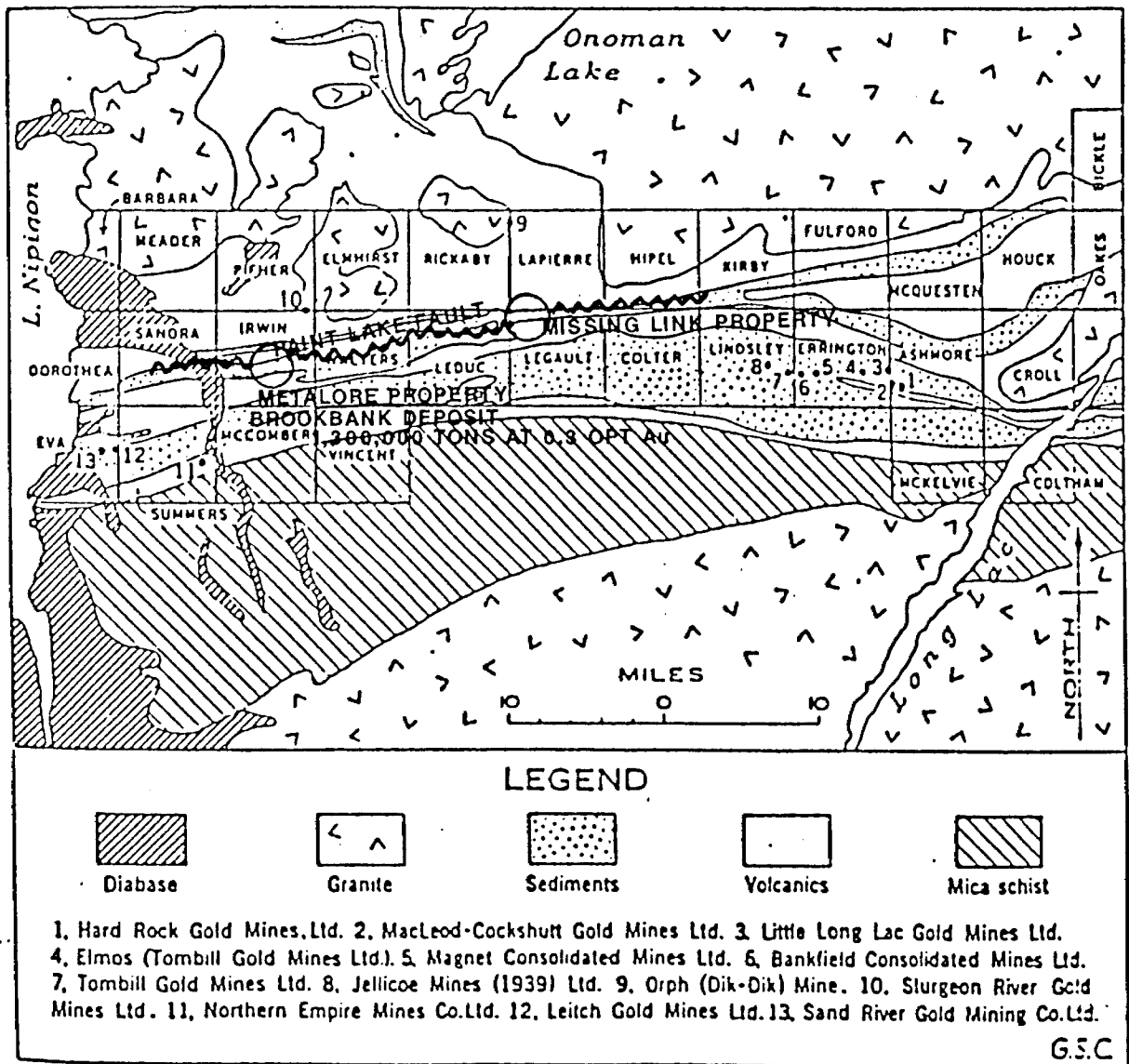
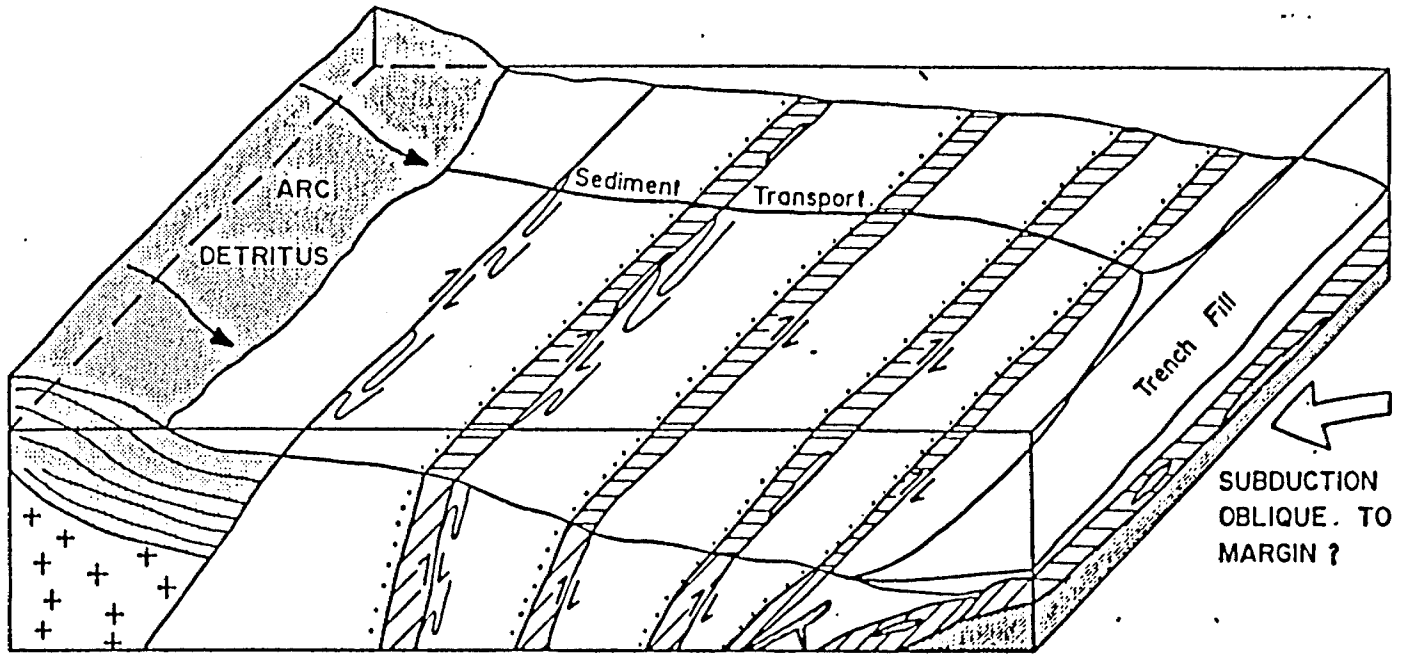


Fig. 4.—Geological outline map of Little Long Lac-Sturgeon River area.

Table 1. Gold and silver production in the Beardmore-Geraldton area.

<u>Mine</u>	<u>Years</u>	<u>Ounces Gold</u>	<u>Ounces Silver</u>	<u>Tons of Ore Milled</u>	<u>Average Gold Grade-ozs./T</u>	<u>Average Silver Grade-ozs./T</u>
Bankfield	1937-42 1944-47	66,417	7,590	231,009	0.29	0.03
Beardmore (Northern Empire)	1934-41 1949	149,493	19,803	425,866	0.35	0.05
Brengold	1941, 1949	134	-	46	2.91	-
Hard Rock	1938-51	269,081	9,009	1,458,375	0.18	0.01
Jellicoe	1939-41	4,238	145	10,620	0.40	0.01
Leitch	1936, 1968	847,690	31,802	920,745	0.92	0.03
Little Long Lac	1934-54 1956	605,499	52,750	1,780,516	0.34	0.03
MacLeod-Cockshutt	1938, 1968	1,475,728	101,388	10,337,229	0.14	0.09
Magnet Consolidated	1938-43 1946-52	152,089	16,879	359,912	0.42	0.05
Maloney Sturgeon Prospect	1937	73	16	1	73.00	16.00
Maylac	1946-47	792	46	1,518	0.52	0.03
Mosher Long Lac	1962-66	330,265	34,604	2,710,657	0.12	0.01
Orphan (Dikdik)	1934-35	2,460	1,558	3,525	0.70	0.44
Sand River	1937-42	50,065	3,628	157,870	0.32	0.02
Sturgeon River	1936-42	73,438	15,922	145,123	0.51	0.11
Talmora-Long Lac	1942, 1948	1,417	36	6,634	0.21	0.01
Tashota-Nipigon	1935, 1938	12,356	14,527	51,200	0.24	0.28
Theresa	1935-38 1941-43, 1945 1950-53, 1955	4,785	202	26,120	0.18	0.01
Tombill	1938-42, 1955	69,120	8,595	190,622	0.36	0.05

(a) Archaean (c. 2770 my.)



(b) Post accretion (c. 2600 my.)

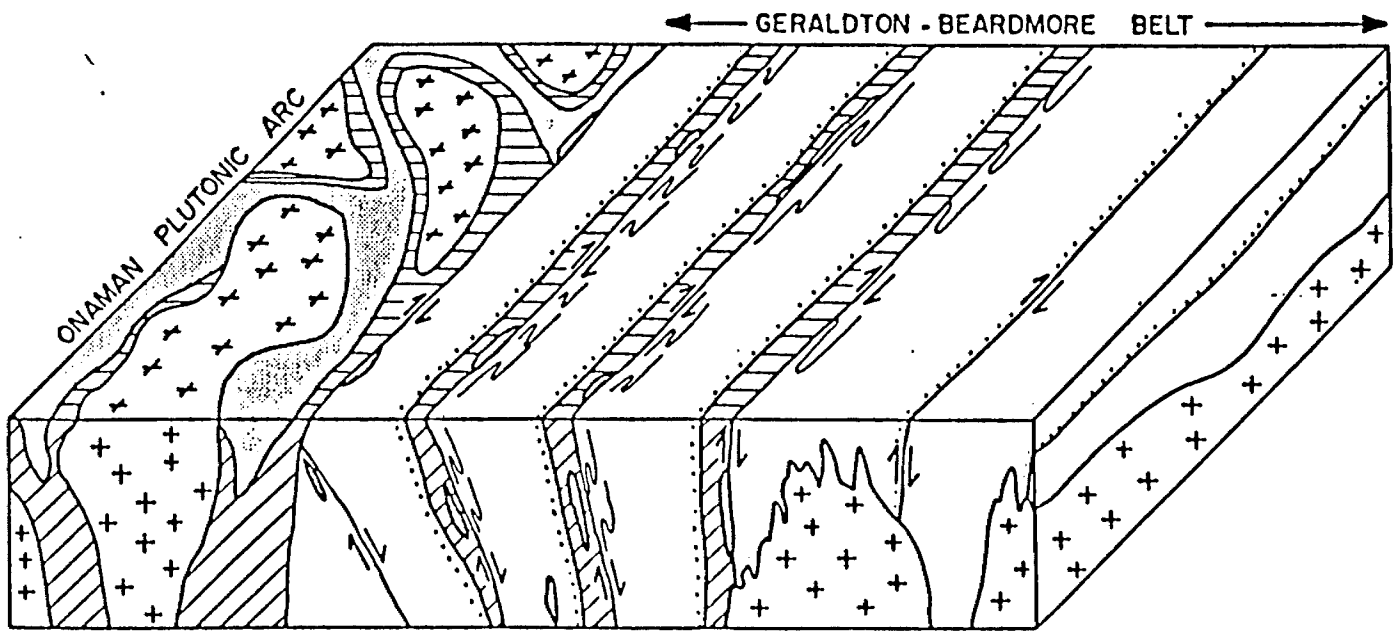


Figure 1. Schematic diagrams of the arc-accretionary prism model during prism formation and subsequent to accretion to Wawa terrain to the south.

by Placer Dome and Metalore Resources, gold mineralization is associated with an east-northeast trending shear/fault system known as the Brookbank Fault. This fault is a secondary splay off of the transcurrent east-west trending Paint Lake Fault, which demarcates the boundary between the northern Onaman - Tashoda Belt, and the southern Beardmore - Geraldton Belt. Then Brookbank Fault juxtaposes mafic metavolcanics to the south, against a thin slice of polymictic paraconglomerate to the north. The fault/shear zone is characterized by intense carbonatization, sericitization, hematization, and local silicification of both lithologies along the contact, over widths to 20 metres. Gold mineralization is associated with disseminated pyrite to 20% within the shear zone, as well as distinct quartz-tourmaline veins developed at the contact. At the Brookbank deposit, reserves in excess of 1.5 million tons at 0.27 OPT Au have been outlined to date, most of which come from below 800 feet of surface. The potential for other, similar deposits along the entire strike length of the Paint Lake Deformation Zone is relatively good, and is the target model for the Missing Link property exploration program.

3. Onaman - Tashota Belt

A) Felsic volcanic\intrusive hosted gold (polymetallic) mineralization (Quebec Sturgeon River, Dik Dik, Crooked Green Creek Mines).

Typically high grade and low tonnage in nature, gold deposits of the Onaman - Tashota Belt are fissure type auriferous quartz - sulphide - carbonate veins in sheared intermediate to felsic metavolcanics, usually proximal to felsic intrusive stocks. For example, at the Dik Dik or Orphan Mine, auriferous quartz veins are hosted by a thin shear zone which crosses the contact between intermediate metavolcanics and granodiorite of the Kaby Lake Stock. The quartz veins are mineralized with pyrite, chalcopyrite, pyrrhotite, sphalerite, and galena, and the average grade mined at the deposit was 0.70 OPT Au.

2.6 GENERAL GEOLOGY OF THE MISSING LINK PROPERTY

The Missing Link property is underlain predominantly by mafic

metavolcanics of the Onaman - Tashota Belt. Along the southern margin of the property are polymictic paraconglomerates of the Beardmore - Geraldton Belt, and the contact between the two terrains, the regional Paint Lake Fault/Deformation Zone, is interpreted as crossing through Jory Lake, along the southern boundary of the property. The Jellicoe Fault, a northeast trending, sinistral structure, appears to have dislocated regional stratigraphy by as much as 1.5 kilometres north, immediately west of the property. Prior to recognition of this dislocation, based on high resolution airborne magnetics, the eastern continuation of the Paint Lake Deformation Zone was poorly defined.

Intercalated with the predominantly mafic metavolcanic pile are thin interflow graphitic metasediments, as defined by previous drilling immediately east of the property (Amax, Hudbay, Inco - see following section of this report). Locally small conformable gabbroic sills intrude the mafics, as do thin quartz-feldspar porphyry dykes.

Recent geological work on the property is described in the following section of this report.

2.7 PREVIOUS WORK

Prior to the 1986 staking of the current claim block, there is no recorded work on ground that now constitutes the Missing Link Property. The discovery of several overgrown trenches on the property during staking, however, indicates that the ground has seen at least some previous work, probably during the initial exploration rush in the camp, in the early 1930's.

During 1986, the property vendors discovered several trenches and pits north of Jory Lake, which exposed a zone of shearing and associated carbonate-sericite-silica alteration within mafic metavolcanics. Grab samples from sheared material collected that summer returned assays to 0.075 OPT Au. Samples from a thin quartz - arsenopyrite vein collected from one trench also returned gold values to 0.52 OPT Au. On the strength of these assays, and because of news of significant deep intersections on the Metalore Property 30 kilometres west and along strike, the property was optioned by Golden Earth Resources in late 1986.

During 1987, Golden Earth Resources contracted an Airborne Magnetics and VLF-EM survey over the property. The survey, completed by Terraquest Ltd., delineated two, east-west trending linear magnetic lows crossing the southern portion of the claim group, both thought to reflect zones of underlying carbonatization within the predominantly mafic metavolcanic terrain. Two parallel linear strong magnetic highs were also defined by the survey, both attributed to zones of magnetite enrichment within the mafic metavolcanics.

Also in 1987, ground magnetics and VLF-EM surveys were completed over the ice on all lakes on the property. These surveys identified several VLF-EM anomalies, all of which however were attributed to conductive lake bottom sediment effects (Lassila, 1987).

The property remained inactive through to 1989, when Golden Earth Resources terminated their option on the claim block. At that time, the vendors completed limited power stripping programs proximal to and along strike from the initial discovery trenches. These stripping programs delineated the east-west trending zone of shearing and associated alteration within the mafic metavolcanics over a strike length of almost 2000 feet.

In December, 1989, Homestake Mineral Development Company optioned the property, and commenced work on the ground in May, 1990.

Adjacent to the property, several exploration programs by various companies has taken place since the early 1970's.

In 1971, Inco drilled two holes, totalling 326 feet, in the Delisle Lake area, immediately east of the current claim block. Both holes targeted EM conductors, and intersected graphitic and sulphide (Po,Py) interflow horizons within intermediate to mafic metavolcanics. No assays were reported with the drill logs on file.

In 1972, Hudson Bay Exploration and Development Company Ltd. completed an 8 hole, 2,629 foot drilling program in the Lapierre Lake area, approximately 5 kilometres east of the Missing Link property. Again, all holes targeted EM conductors, and encountered barren graphitic and sulphide interflow horizons within intermediate to mafic metavolcanics. No significant gold

assays were returned from the drilling program.

In 1973, in the same area, Amax drilled three holes totalling 1,175 feet. All three holes targeted EM responses, and intersected graphitic and Py-Po interflow horizons within mafic metavolcanics. No significant gold assays were reported from the drilling program.

In 1980, Dome Mines Ltd. completed a 3 hole, 899 foot drilling program between Delisle and Lapierre Lakes, approximately 3 kilometres east of the property. Again, these holes intersected barren graphitic and sulphidic interflow horizons within mafic metavolcanics, from which no significant gold assays were reported.

Immediately southwest of the property, in 1986 through 1987, Rampart Resources completed a 9 hole, 4,570 metre diamond drilling program. All holes intersected metasediments of the Southern Metasedimentary Sub-belt, predominantly wackes, argillites, and some polymictic paraconglomerate. Several holes encountered zones of significant shearing and associated carbonatization/silicification within the metasediments, though no significantly elevated gold values were returned from the drilling program.

1990 EXPLORATION PROGRAM

During the period May 1 through August 10, 1990, Homestake Mineral Development Company Ltd. completed an integrated exploration program on the 54 claims that comprise the property, including;

- establishment of a 72 line kilometre cut line grid over the entire property.
- detailed 1:2000 scale geological mapping over the entire property, with collection and subsequent analyses (Au, 30 element ICP) of 48 rock samples.
- completion of 66.0 line kilometres of total field magnetics, and VLF-EM surveys over the entire property.

- 121 hours of power stripping, in eight areas of the property, employing a 215 Caterpillar Excavator, and 11 days of Wajax pump outcrop washing.
- detailed 1:100 mapping and channel sampling of stripped areas, with analyses of 325 rock samples for gold.

The results of this work is summarized in the subsequent sections of this report.

3.0 DETAILED TECHNICAL DATA

3.1 GEOLOGICAL MAPPING AND LITHOGEOCHEMICAL SAMPLING

1) METHODS EMPLOYED

To facilitate access and provide control for the geological mapping program on the property, a 72 line kilometre cut line grid was established in late April and early May. An east-west trending, 2.3 kilometre base line was cut across the southern portion of the property. Shorter, east-west trending control tie-lines were cut at 2+50S, 10+00S, 7+50N, 12+00N, and 20+00N, primarily to provide control points for lines cut between the several lakes on the property. North-south trending cross-lines were established at 100 metre intervals, between 10+00S and 20+00N, providing detailed grid coverage over the entire property. Pickets on all base, tie, and cross lines were established at 25 metre intervals, with the station co-ordinates clearly inscribed on each.

The grid was employed in providing control during the geological mapping of the property. All outcrops encountered during line, and between line traverses were accurately tied into the grid employing a hip-chain and compass. Similarly, all topographic and geomorphic features were tied into the grid during mapping the property.

At each outcrop, detailed notations as to lithology, structure, alteration, and mineralization were recorded. Where warranted, specifically at all outcrops exhibiting significant alteration and/or mineralization, samples were collected for gold and 30 element ICP analysis.

The results of the geological mapping appear in Appendix 1, as the 1:2000 scale North, Central, and South Sheets (Maps 1 to 3), as well as in Appendix 2 on a 1:5000 scale Geology-Geophysics-Geochemistry Compilation (Map 4). All sample locations, as well as detailed descriptions and resultant Au analytical results, also appear plotted on the 1:2000 scale Maps 1 to 3. Raw geochemical data appears in Appendix 5.

RESULTS AND INTERPRETATION

LITHOLOGIES

The mapping identified six major lithological groups on the property, as outlined on the legend appearing on each of Maps 1 through 4. Below are general descriptions of each.

1. INTERMEDIATE TO MAFIC METAVOLCANICS

This is the most prevalent lithological group encountered during mapping, outcropping extensively in the southwest portion of the property, and interpreted as covering the majority of the claim group. Where possible, subdivisions within the group were recorded, and contacts drawn, but for the most part minor textural and alteration/shearing variations were local to the degree that individual sub-units were difficult to trace over any significant strike continuity. As such, sub-units 1A, 1B, and 1C are all incorporated within the confines of one contact.

1A. ANDESITE

This sub-unit outcrops sporadically throughout the southwest portion of the property, and is best exposed in the vicinity of Lines 12E to 15E at baseline. The lithology is usually massive to very weakly foliated, light green, and aphanitic to very fine grained. It appears to grade laterally at this location into unit 5 (locally a diorite), and may be a very fine phase of the intermediate intrusive rock. Elsewhere, several "andesitic" appearing outcrops are intermixed with "basaltic" appearing outcrops, and the two terms were often employed simultaneously in lithology descriptions. The term andesite, in the field sense, was used to describe less chloritic (and usually less foliated), lighter green, slightly harder zones within the predominantly basaltic appearing terrain. The variation is, again, probably the result of shearing\alteration intensity, as opposed to a primary magmatic difference.

1B. BASALT

This unit outcrops throughout the southern portion of the property. It is usually moderately foliated, and weakly to

moderately chloritized. Usually aphanitic, there are zones in which feldspar crystals are visible, and this coarser unit often grades into sub-unit 1C. Primary textural features are rarely observed. In some places, severely stretched pillow selvages can be seen, but the pervasive fabric developed in the rock has obliterated most readily identifiable textures.

1C. BASALT TO GABBRO

This sub-unit outcrops sporadically throughout the basaltic terrain, as a crystalline equivalent to the predominantly aphanitic basalt. It is for the most part only locally present, as coarser portions of the mafic flows. Typically the rock is moderately foliated and chloritized, with weak to moderate sausseritization of the plagioclase. In some cases, specifically along a prominent south facing ridge between Lines 4E and 8E, at 5+00S, the distinct coarser flows can be followed with some confidence. This sub-unit differs from the Unit 5 gabbros in that it can be clearly related to adjacent flows, is rarely coarser than 2mm, and exhibits the same degree of alteration and shearing as the adjacent flows. The distinct diorite to gabbro unit (5) is usually massive, and much coarser grained.

1D. MAGNETITE BEARING BASALT

This very distinct unit occurs as thin bands paralleling stratigraphy across the southern portion of the property. It is characteristically very black, aphanitic, and fissile, and in many places appears to be laminated to the extent that initially the sub-unit was thought to be a tuffaceous equivalent. Where well exposed, however, it is a distinct flow, and can be followed with a very degree of confidence both in outcrop, and via its strong magnetic signature. Typically the rock carries 5 to 10% very fine grained disseminated magnetite. The unit provides good stratigraphic control through the southern portions of the property.

2. INTERMEDIATE TO MAFIC TUFFS/LOCALLY DERIVED METASEDIMENTS

2A. ANDESITE TO BASALT (T/S)

In several locations throughout the stratigraphy, the degree of foliation becomes intense, causing the mafic metavolcanics to become thinly laminated, and extremely fissile. This "field term" was employed to describe such zones, which, in many poorly exposed locales appeared to be locally derived metasediments or tuffaceous equivalents to the intermediate to mafic metavolcanic flows. In retrospect, and as a result of the stripping program on the property, it became apparent that this unit is simply an intensely sheared equivalent to Unit 1. As such, it is incorporated within the contacts defining Unit 1.

2B. QUARTZ EYE INTERMEDIATE TUFF

This sub-unit was noted only at two locations, one in the vicinity of L2+00W, 2+75S, and the other in a thin slit trench at L1+50E, 2+50S. At both locations, the unit is thin (<5 metres), and comprised of an aphanitic andesitic appearing matrix with 5 to 15% small (<3 mm.) elongate quartz crystals\fragments. The unit is concordant with stratigraphy, and probably represents a thin interflow tuffaceous horizon.

2C. OXIDE FACIES IRON FORMATION

This sub-unit does not outcrop on the property, but rather is interpreted as being present based on geophysics. In the central portion of the claim block, three parallel, east-west trending coincident linear magnetic highs and VLF-EM conductors were defined by ground geophysical surveys. The responses are typical of either a massive pyrrhotite exhalative interflow, or an oxide facies iron formation with a significant sulphide (sulphidized) component. It is interesting to note the apparent disruption and repetition of the otherwise very linear features in the vicinity of Lines 15+00E to 22+00E, between 8+00N and 10+00N. This may be a zone of complex folding within the exhalative, and represents an interesting drill target, as proposed in section 1 of this report.

2D. PYRITIC\GRAPHITIC INTERFLOW

This sub-unit does not outcrop on the property, but rather is inferred based on the interpretation of geophysical data, and the discovery of massive pyrite float in some of the trenches completed on the claim block.

A strong VLF-EM conductor, with no associated magnetic response, trends east-west across the property along Baseline 0+00. Immediately south of this anomaly, in the vicinity of L5+00E, 0+75S, several large boulders of massive pyrite were discovered in basal till in an old trench. The conductor is therefore interpreted to be an interflow massive pyritic/graphitic horizon, with little economic potential for gold.

3. EPICLASTIC METASEDIMENTS

3A. POLYMICTIC PARACONGLOMERATE

This unit outcrops sporadically south of Jory Lake. It is typically comprised of a poorly sorted graywacke matrix, with predominantly quartz, chert, and dioritic to granodioritic clasts to 10 cm. and 40% by volume of the rock. Where observed in outcrop, the paraconglomerate showed no indications of strong foliation or significant alteration. The contact with the northern volcanic package is inferred from airborne magnetic data to cross the central portion of Jory Lake, trending at approximately 080 degrees. The contact, as with most in the Beardmore-Geraldton belt, is felt to be tectonic, and may be the locus of significant hydrothermal alteration/mineralization, analogous to the Metalore Brookbank deposit. Two holes are proposed to fence through the interpreted contact area in the vicinity of a moderate VLF-EM anomaly.

4. LITHOSTRUCTURAL\ALTERATION UNIT

4A. CHLORITE-SERICITE-Fe CARBONATE SCHIST

Three distinct zones of intense shearing and related alteration were defined on the property during mapping. All zones cut intermediate to mafic metavolcanics, and are characterized by an

assemblage of sericite, Fe carbonate, and remnant chlorite. The criteria used in classifying a shear within the mafics volcanics as Unit 4, was a combined sericite-carbonate content of >50%. In fact this classification was redundant, as the zones of alteration were extremely well defined, with sharp contacts over the width of 1 to 2 metres with the less altered and sheared metavolcanics. Typically the zones are comprised of Fe-carbonate bands along schistosity planes, to 20 to 50% of the rock, within an assemblage of sericite and chlorite. The central, most intensely sheared portions of the zones are almost exclusively sericite-carbonate, with chlorite content increasing at the expense of sericite outwards towards the alteration zone margins. Shear fabric within the zones is intense, trending subparallel and parallel to stratigraphy at 075 to 090 degrees. Strong S kink banding is prevalent throughout the shear, as are north-south trending extension fractures, indicating that probably the shears are cutting zones of axial planar weakness within a broad fold structure. Direction of fold closure is not known. Secondary quartz, quartz-Fe carbonate, and Fe carbonate veins are sporadically present throughout the shear zones, almost exclusively as thin, very discontinuous, boudined to brecciated and rotated foliation parallel features. Only a very few of these veins carry associated disseminated pyrite and arsenopyrite mineralization. A more detailed discussion of the economic significance of the shears appears later in this report.

The northernmost zone defined by mapping trends at 080 degrees between L0+00 and L8+00E, at approximately 1+00S, and is best exposed in an old trench on L5+00E, 1+00S. At this location, the alteration zone is at least 15 metres in width.

The central shear zone is exposed in a series of pits from L5+00E at 1+50S, to L9+00E at 1+00S, again trending at 080 to 085 degrees. This zone is of appreciable width, to 20 metres.

The southern zone is exposed in a series of trenches between L2+00E, at 2+75S, and L5+00E, at 2+25S. The zone initially appeared to trend at 070 degrees, slightly oblique to stratigraphy, but as will be discussed in the Power Stripping section of this report, is actually comprised of a series of sinistrally offset en echelon zones trending at 085 degrees.

Several thin and apparently discontinuous zones of similar alteration were discovered elsewhere on the property. Between L4+00E and L5+00E, at 3+25S, a thin 5 metre wide zone can be traced in relatively good outcrop exposure for only 20 metres.

Immediately west of the property, two thin zones are exposed along the Kinghorn Road on ground held by a competitor, and trend at 075 degrees on to our property. The immediate extensions of these exposures could not, however, be located on our ground, due to very poor outcrop exposure in the immediate area.

The three major zones of alteration and shearing all are probably the result of a broad anastomosing shear system related to and along the Paint Lake Fault.

5. MAFIC INTRUSIVE ROCKS: DIORITE, GABBRO

This unit outcrops in the east central portion of the property. Between L9+00E and L14+00E, at approximately 0+50S, a major ridge of diorite to gabbro is well exposed. South of this zone, between L6+00E and L16+00E, at approximately 2+00S, a series of exposures define a 080 degree trending gabbro horizon. Both zones are conformable to stratigraphy, indicating emplacement as sills within the sequence of volcanics. The unit is characterized by its relatively coarse texture (predominantly medium grained), and relatively weak fabric development in relation to the encompassing volcanic terrain. Compositionally the unit varies locally from dioritic to gabbroic appearing (based on ferromagnesian mineral content). The unit is non-magnetic.

6. LATE PROTEROZOIC INTRUSIVE ROCKS - DIABASE

Thin (>1 metre) strongly magnetic, and characteristically porphyritic diabase dykes were noted at only one location on the property, in an old pit at L7+25E, 1+25S. Locally the dyke was extremely contorted, and offset by 030 degree trending fractures/faults. Generally in the area, and based on the regional airborne magnetics, these dykes trend north-south as a swarm across the central part of the property.

STRATIGRAPHY

Based on the geological mapping, as well as the geophysical definition of interformational stratigraphic exhalative horizons, the stratigraphy trends at approximately 085 degrees across the property. Local minor variations, between 075 and 090 degrees, are probably the result of gentle flexural folding of the sequence.

A major stratigraphic break between the younger, polymictic paraconglomerates of the Beardmore-Geraldton Belt, exposed south of Jory Lake, and the predominantly mafic metavolcanic assemblage of the Onaman-Tashoda Terrain, encountered during mapping on most of the property, is envisioned as crossing through Jory Lake, at approximately 075 degrees. This break, west of the property, is occupied by the regional Paint Lake Fault/Deformation Zone. Splays from this regional fault are associated with significant gold mineralization west and along strike from the property, at the Brookbank deposit.

STRUCTURE

The aforementioned Paint Lake Fault is inferred as crossing the property proximal to the contact between the sediments, to the south, and volcanics to the north, as just discussed. With no exposure of the contact zone, it is impossible to determine if the defined zones of Unit 4 are actually expressions of the anastomosing Paint Lake Fault/Shear system, or subsidiary splays off of a contact hosted shear/fault system. As outlined in Section 1, a drill fence is designed to test the contact zone.

A pervasive fabric is developed throughout the volcanics exposed on the property, trending parallel to stratigraphy at approximately 085 degrees, and dipping steeply to the south at 075 to 085 degrees. Throughout the property, small scale S kink banding, and north-south extensional fractures, indicate that the stratigraphy is situated on the limb of a fold structure, though closure direction is not known.

Several 030 degree trending cross faults sinistrally transpose stratigraphy on a small scale (<5 metres) throughout the property. These faults are consistent with an interpretation of dextral movement on a regional shear system, reflecting antithetic slip along the 030 degree trend within the broad deformation system.

LITHOGEOCHEMICAL SAMPLING RESULTS

During first pass mapping, a total of 49 samples were collected on the property, and forwarded to Min-En Laboratories for Au analysis, and 30 element ICP analysis. Subsequent re-analysis of all samples for gold was completed by Chemex Laboratories, also of Vancouver. As mentioned, all Au results appear plotted on the 1:2000 scale geological maps, with detailed sample descriptions. The raw geochemical data appears in Appendix 5.

Only 5 of the initial 49 samples collected from the property returned anomalous gold values of >50 ppb. They were;

<u>SAMPLE NO.</u>	<u>Au (PPB)</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
38415	262	L3+40E, 2+25S	Pit exposing Fe carb-ser altered shear, with tr. diss Py.
38422	820	L4+00E, 2+20S	Pit, exposing a 2M wide quartz vein. Sample is from mineralized wallrock (5% Py, 3% AsPy) immediately adjacent to vein.
38437	1968	L5+10E, 1+50S	Pit exposing qtz-carb veining in Fe carb-ser altered mafics. Grab is of qtz vein blast rock with 3% Py, 3% AsPy.
38439	465	L5+30E, 1+50S	20 metres east of above pit, grab of ser-Fe carb schist with tr. AsPy,Py.
38449	310	Kinghorn Rd.	Fe carb - sericite altered shear zone west of property, with 40% thin quartz-carbonate stringers and 3% diss. Py, 1% AsPy.

All other samples failed to return appreciable gold values. The ICP data failed to define broad zones of any pathfinder element (As, Sb, B, W,) enrichment within the sampled alteration zones. Arsenic was obviously elevated in samples in which arsenopyrite was noted, but again most samples returned only background level values. A discussion of the economic significance of the sample results appears in Section 4 of this report.

3.2 GROUND GEOPHYSICAL (VLF-EM, TOTAL FIELD MAGNETICS) SURVEYS

i) METHODS EMPLOYED

During the period May 26 to June 03, 1990, 66 line kilometres of VLF-EM and total field magnetics surveys were completed on the property. The work was performed by Northwest Geophysics Ltd., a Thunder Bay based contractor.

Instrumentation for the survey was an E.D.A. Omni IV, which reads VLF-EM and total field magnetics simultaneously. Total field magnetic readings were taken at 25 metre intervals along all cross lines. All readings were corrected for diurnal drift employing a base station magnetometer cycling at 30 second intervals, established at L1+00E, 1+00S. The data appears plotted on the enclosed 1:5000 Contoured Total Field Magnetism Map (Map 5) in Appendix 3. A base value of 59,000 nT was subtracted from all readings, and the data appears contoured at 100 nT intervals. VLF-EM readings were also taken at 25 metre spacings along all cross lines, employing the transmitter at Cutler, Maine (NAA, 24.0 KHz). The in-phase and quadrature components of the VLF-EM field were measured at each station, and appear plotted as line-profiles at 1 cm. + 50% on the enclosed Map 6 in Appendix 3.

RESULTS AND INTERPRETATION

TOTAL FIELD MAGNETICS

The majority of the property is characterized by a moderate magnetic signature in the 59,500 to 59,800 nT range. In the southern portion of the claim group, several thin, linear magnetic highs cross the property at approximately 080 degrees. These correspond well with outcrops of Unit 1D, a strongly magnetic basalt, and the magnetism data was useful in defining the limits of these stratigraphic markers.

In the central and northern portion of the property, the thin, linear east - west trending magnetic highs correlate well with strong VLF-EM conductors, and probably reflect the presence of interformational chert-pyrrhotite/magnetite exhalative horizons, as discussed in the following section of this report.

There is no apparent signature to the inferred contact between the metasediments to the south of Jory Lake, and the northern volcanic package, though obviously this due in large part to the lack of coverage over the lake.

Similarly, there are no definitive north-south trending highs that would correspond to crosscutting Proterozoic diabase dykes, though there is an apparent airborne magnetic feature so interpreted. Because of the orientation of the grid, it is very likely that the dykes were missed between lines.

VLF-EM

Eight distinct conductive horizons were outlined on the property by the VLF-EM survey, and appear labelled as A through H on the enclosed profile plot. Below are interpretive comments as to their cause.

CONDUCTOR A

This short strike length anomaly, located in the extreme southwest portion of the property, trends at 070 degrees into Jory Lake, where obviously it is lost. It is located proximal to the inferred contact between the polymictic paraconglomerate to the south of Jory Lake, and the predominantly volcanic package to the north. The conductor may reflect shearing at that contact, or more optimistically, a horizon of significant sulphide mineralization. As previously mentioned, a two hole fence to test the contact zone and this VLF-EM anomaly has been proposed in Section 1.

CONDUCTOR B

This long strike length, property wide east - west trending strong conductor is interpreted to be a massive pyrite exhalative horizon, or a pyritic-graphitic interflow sediment, due to its long, interformational character, the lack of any associated

magnetic response, and the discovery of massive pyrite boulders in trenches immediately south of the axis of the anomaly. All samples of the massive pyrite float failed to return any elevated precious or base metal values, and as such the horizon is not seen as having economic significance. A deep hole designed to test the parallel carbonate shear zones immediately south of this conductor will pierce the anomaly, however, as the additional drilling required to truth the interpretation is minimal (25 metres).

CONDUCTOR C

This strong conductor trends east-west across the entire central portion of the property, and has a coincident moderate magnetic response. It is clearly an interformational horizon, and because of the magnetic association is interpreted as being a chert-pyrrhotite or pyrrhotized oxide facies iron formation.

CONDUCTORS D, E, F

These shorter strike length conductors, immediately north of Conductor D, all also exhibit a coincident and contorted magnetic signature. They are interpreted as being folded equivalents of Conductor D, and a three hole fence is proposed to test all four conductors in an area of inferred complex folding. This area represents an interesting target, as there is very real potential for sulphidized iron formation hosted gold mineralization in this setting.

CONDUCTOR G

This east-west trending strong conductor crosses the property in the vicinity of TL12+00N. Again, it is associated with a moderate magnetic anomaly, and is interpreted as being a chert-pyrrhotite exhalative horizon. Drilling by Dome and HUDbay east of the property appears to have intersected the eastern extension of this conductor, encountering thin chert-pyrrhotite bands within andesites.

CONDUCTOR H

This short strike length, weak conductor, situated in the extreme northwest corner of the property, is probably an overburden related anomaly as opposed to a truly conductive bedrock response.

3.3 POWER STRIPPING/TRENCHING PROGRAM

3.1 METHODS EMPLOYED

During the period June 13 through July 15, 1990, a power stripping program was completed on the Missing Link property by Nelco Equipment, a Beardmore based contractor. The program involved 121 hours of backhoe work, employing a 215 Caterpillar Excavator, and 16.5 days of outcrop washing employing a Wajax pump. Prior to the stripping program, all major areas to be stripped were cleared of timber by Mr. Dave Kindla, a Beardmore based contractor, employing a Timberjack skidder. The cleared timber has been limbed and stacked on the property.

Following the stripping program, detailed geological mapping, at a scale of 1:100, was completed over all trenches in which outcrop was exposed. All major areas of interest were channel sampled at 10 metre line intervals, with collection of 1 metre saw cut channel samples across the zones of potential mineralization. A total of 325 channel samples were collected, and forwarded to Chemex Laboratories in Vancouver for gold analysis by fire assay.

Appendix 4 contains Maps 7 through 14, as follows;

- Map 7 1:2000 Location Map, Stripped Areas 1 to 6
- Map 8 1:2000 Location Map, Stripped Area 7
- Map 9 1:2000 Location Map, Stripped Area 8
- Map 10 1:2000 Location Map, Stripped Area 9
- Map 11 1:100 Detailed Geology, Sample Locations, and Gold Geochemistry, Stripped Area Number 1
- Map 12 1:100 Detailed Geology, Sample Locations, and Gold Geochemistry, Stripped Area 2A
- Map 13 1:100 Detailed Geology, Sample Locations, and Gold Geochemistry, Stripped Area 2B
- Map 14 1:100 Detailed Geology, Sample Locations, and Gold Geochemistry, Stripped Area 3

All raw analytical data appears in Appendix 5.

The following section of this report summarizes the results of the stripping program.

3.2 RESULTS AND INTERPRETATION

STRIPPED AREA 1

This stripped area, approximately 125 metres in length, and 30 metres in width, was excavated in the vicinity of a series of small hand pits and trenches that exposed quartz-carbonate veining within Unit 4, the chlorite-sericite-Fe carbonate altered and sheared mafic metavolcanics.

The stripping exposed an east-west zone of intense shearing and associated chlorite-sericite-Fe carbonate alteration, approximately 25 metres in width, hosted within less altered, predominantly massive mafic metavolcanics. Within the shear zone, are several irregular, discontinuous, boudined to brecciated quartz and quartz-carbonate veins, carrying sporadic pyrite and rarely, arsenopyrite mineralization. A total of 180 1 metre channel samples were cut across the exposed zone, at ten metre intervals. Only 7 of the 180 samples returned significantly elevated gold values of >500 ppb. They were;

<u>SAMPLE NO.</u>	<u>ASSAY</u> (GPT)	<u>LOCATION</u>	<u>DESCRIPTION</u>
39086	1.78	L5+10E	1 metre channel across shear with thin qtz-Aspy stringers to 10% rock. Grabs from this location had previously returned values to 1.96 GPT.
39115	0.620	L5+20E	1 metre channel sample across ser-chl-Fe carb shear. No significant veining or mineralization noted.
39157	1.16	L5+50E	1 metre channel across shear, with a 20 cm. discontinuous quartz vein.

<u>SAMPLE NO.</u>	<u>ASSAY</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
39164	0.96	L5+60E	1 metre channel across shear, with a 20 cm. qtz. vein.
39165	2.06	L5+60E	1 metre channel across shear with a 25 cm. qtz. vein.
39166	0.65	L5+60E	1 metre channel across shear with a 20 cm. qtz. vein and trace Aspy.
39177	1.16	L5+70E	1 metre channel across shear, with a 20 cm. qtz. vein.

The best results came from three contiguous samples crossing a zone of quartz veining in the extreme east section of the stripped area. The 3 metre interval averaged 1.22 gpt, though only 5 metres along strike, the same zone of veining returned values of 30 to 100 ppb. The low values, and sporadic nature of the gold mineralization encountered in this area warrant them uneconomic. It is worth noting the increase in vein density moving east through the stripped area, and the potential for more significant mineralization along strike in the shear system.

STRIPPED AREA 2

This stripped area, centred around L7+00E, 1+25S, was designed to expose the shear zone east and along strike from Stripped Area 1, in the vicinity of an old pit exposing significant quartz veining within the shear. Two areas were exposed as a result of the trenching/stripping, and appear as Maps 12 and 13 in Appendix 4. Both areas exposed the shear zone, and associated chlorite-sericite-Fe carbonate alteration. In Area 2A, significant quartz veining was present within the shear, though sulphide mineralization was extremely rare. No significantly elevated gold values were returned from the 82 channel samples collected from the zone.

STRIPPED AREA 3

This stripped area, approximately 90 metres in length, by 15 metres in width, was designed to better expose zones of shearing and related alteration within the mafic metavolcanics uncovered by Mr. Nolan Cox in 1989. The stripping exposed two zones of shearing, and associated chlorite-sericite-Fe-carbonate alteration within the mafic metavolcanics, both very discontinuous in nature. Within the shears, quartz veining is rare, with the exception of a Z folded, 2 metre thick vein at the nose of a tight Z fold on L3+90E. The strike extent of the vein, however, is only 2 metres, as the fold nose host plunges steeply east at 55 degrees. No significantly elevated (>500 ppb) gold values were returned from the 53 channel samples collected from the zones of shearing and alteration.

STRIPPED AREA 4

This small trench, centred around L4+25E, 3+25S, was designed to better expose a small zone of shearing and related alteration within mafic metavolcanics discovered during the mapping program. The trench, approximately 25 metres by 10 metres, exposed a 4 metre wide zone of intense shearing, trending at 075 degrees, across its length. The shearing, hosted within mafic metavolcanics, was accompanied by pervasive Fe carbonate and sericite alteration. No significant quartz veins were present in the shear. Minor (<5%) disseminated pyrite was present locally within the shear zone. Grab samples from the zone failed to return significantly anomalous gold values, the highest being only 270 ppb Au.

STRIPPED AREA 5

This trench targeted a strong VLF-EM conductor. Unfortunately, the trench did not reach bedrock, as the overburden was locally in excess of 7 metres in depth.

STRIPPED AREA 6

This thin trench, located on Line 7+00E between 0+50 and 1+00S, exposed a broad zone of intense shearing and associated Fe carbonate-sericite alteration within mafic metavolcanics. Only one thin 10 cm. quartz vein was present in the shear, from which two grab samples returned values of 450 and 210 ppb Au.

STRIPPED AREA/TRENCH 7

This thin trench, located on L12+00E, between 0+25N and 0+75N, was designed to expose a strong VLF-EM conductor. The trench failed to reach bedrock, as overburden was locally in excess of 7 metres.

STRIPPED AREA/TRENCH 8

This thin trench, located between L3+00E and L4+00E, at 6+75N to 7+25N, was designed to expose a strong coincident magnetics/VLF-EM anomaly. The trench failed to reach bedrock, as locally the overburden was in excess of 7 metres.

STRIPPED AREA/TRENCH 9

This thin trench, located on L5+00E between 11+50N and 12+00N, was also designed to provide exposure over a strong coincident mag/VLF-EM anomaly. Again, due to overburden depths in excess of 7 metres, the trench failed to reach bedrock.

4.0 COST STATEMENT

The following is a summary of costs incurred in completing the 1990 exploration program on the property.

1. Option Payment:	\$15,000.
2. Line cutting: (72 km. @\$245\km.).....	\$17,640.
3. Geophysical surveys: (66 km. @\$169.\km).....	\$11,154.
4. Pre stripping tree clearing (Kindla).....	\$2,400.
5. Total Power Stripping Costs: (including labour for tree falling, wajax pump operation, channel sampling, fuel)	\$20,227.
6. Analytical:	\$5,786.
7. Geological Salaries and Supervision:.....	\$15,210.
8. Miscellaneous Field Support:	\$3,528.
<hr/>	
TOTAL:	\$90,945.

5.0 SELECTED REFERENCES

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1987 Assessment Report, MNM Files, Thunder Bay
- Mason, J., and
Matthews, M.
1980
LAPIERRE LAKE AREA, DISTRICT OF THUNDER BAY
OGS Prelim Map P.2070, Thunder Bay Data Series,
Scale: 1:15,840
- Mason, J., and
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GOLD OCCURRENCES, PROSPECTS, AND DEPOSITS OF
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SURVEY IN ... LAPIERRE AND LEGAULT TOWNSHIPS,
THUNDER BAY MINING DIVISION, FOR GOLDEN EARTH
RESOURCES
1987 Assessment Report, MNM Files, Thunder Bay

6.0 STATEMENT OF QUALIFICATIONS

I, Duncan F. McIvor, do hereby state that;

- I am a graduate of the University of Waterloo, with an H.BASc. (Co-operative Earth Science).
- I have been employed in the mineral exploration industry since 1974, holding positions with Esso Minerals Canada, BHP-Utah Mines Ltd., BHP-Utah International, and Homestake Mineral Development Company.
- I am currently employed by Homestake Mineral Development Company, in the capacity of Regional Exploration Geologist, Northwest Ontario District.
- I have personal knowledge that the information contained in this report is complete and correct.

Duncan F. McIvor

Date and Place

7.0 TECHNICAL DATA STATEMENTS



2.13579

File W9004-336

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT - FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GEOLOGICAL
Township or Area LAPIERRE AND LEGAULT TOWNSHIPS
Claim Holder(s) HOMESTAKE MINERAL DEVELOPMENT CO.
Survey Company HOMESTAKE MINERAL DEVELOPMENT CO.
Author of Report DUNCAN McIVOR
Address of Author % PO 290, TIMMINS, ONTARIO, P4N-7N6
Covering Dates of Survey MAY 20 - AUGUST 01, 1990
Total Miles of Line Cut 72 LINE-KILOMETERS

MINING CLAIMS TRAVERSED
List numerically

SEE ATTACHED LIST
(prefix) (number)

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

Geophysical DAYS per claim
--Electromagnetic
--Magnetometer
--Radiometric
--Other
Geological 39.74
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: OCTOBER 06, 90 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. Qualifications 2.5111

Previous Surveys

Table with 4 columns: File No., Type, Date, Claim Holder

TOTAL CLAIMS

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy - Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters - On time _____ Frequency _____

- Off time _____ Range _____

- Delay time _____

- Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

CLAIM STATUS
MISSING LINK PROPERTY

CLAIM	REC. DATE.	ASSESSMENT CREDITS					TOT.	EXPIRY DATE
		GPHY.	GEOL.	GCH.	DR.	EXP.		
907485	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907486	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907487	MAY 20, 86	80	40	0	0	33.52	153.52	MAY 20, 91
907488	MAY 20, 90	80	40	0	0	43.52	163.52	MAY 20, 91
907489	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907490	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907491	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907492	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907493	MAY 20, 86	80	40	0	0	43.52	163.52	MAY 20, 91
907494	MAY 20, 86	80	40	0	0	53.52	173.78	MAY 20, 91
907495	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907496	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907500	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907507	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907508	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907509	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907510	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907511	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907512	MAY 20, 86	80	40	0	0	33.52	153.52	MAY 20, 91
907513	MAY 20, 86	80	40	0	0	38.52	158.52	MAY 20, 91
907514	MAY 20, 86	80	40	0	0	43.52	163.52	MAY 20, 91
907515	MAY 20, 86	80	40	0	0	43.52	163.52	MAY 20, 91
907550	MAY 20, 86	80	40	0	0	100.00	220.00	MAY 20, 92
907851	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907852	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907853	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907854	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907855	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907856	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907857	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907858	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907859	MAY 20, 86	80	40	0	0	43.52	163.52	MAY 20, 91
907860	MAY 20, 86	80	40	0	0	90.52	210.52	MAY 20, 92
907861	MAY 20, 86	80	40	0	0	95.52	215.52	MAY 20, 92
907862	MAY 20, 86	80	40	0	0	85.52	205.52	MAY 20, 92

CLAIM	REC. DATE	ASSESSMENT CREDITS					TOT.	EXPIRY DATE
		GPHY.	GEOL.	GCH.	DR.	EXP.		
907867	MAY 20, 86	80	40	0	0	90.52	210.52	MAY 20, 92
907868	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907869	MAY 20, 86	80	40	0	0	43.52	163.52	MAY 20, 91
907870	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907871	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907872	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907873	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907875	MAY 20, 86	80	40	0	0	80.74	200.74	MAY 20, 92
907876	MAY 20, 86	80	40	0	0	99.32	219.32	MAY 20, 92
907877	MAY 20, 86	80	40	0	0	90.52	210.52	MAY 20, 92
907878	MAY 20, 86	80	40	0	0	85.52	205.52	MAY 20, 92
907879	MAY 20, 86	80	40	0	0	99.52	219.52	MAY 20, 92
907880	MAY 20, 86	80	40	0	0	33.52	153.52	MAY 20, 91
907881	MAY 20, 86	80	40	0	0	28.52	148.52	MAY 20, 91
907882	MAY 20, 86	80	40	0	0	100.00	220.00	MAY 20, 92
907883	MAY 20, 86	80	40	0	0	99.52	219.52	MAY 20, 92
907884	MAY 20, 86	80	40	0	0	23.52	143.52	MAY 20, 91
907885	MAY 20, 86	80	40	0	0	43.52	163.52	MAY 20, 91
907890	MAY 20, 86	80	40	0	0	55.52	175.52	MAY 20, 91

* Note that credits listed as greater than 200 man days are in anticipation of Notices of Reduced Assessment Credit for geological mapping on partially water covered claims. This Claim Status Summary will be updated upon acceptance of all filed work.

Figure 3 illustrates the locations of the claims that comprise the property.



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 450 Matheson Blvd., E., Unit 54, Mississauga,
 Ontario, Canada L4Z 1R5
 PHONE: 416-890-0310

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number : 1
 Total Pages : 2
 Invoice Date : 27-JUN-90
 Invoice No. : I-9017281
 P.O. Number :

Project : 5808
 Comments : ATTN: JIM PIRIE DUNCAN McIVOR

CERTIFICATE OF ANALYSIS

A9017281

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA oz/T	Au FA g/tonne						
38401	208 294	0.002	0.07	-----	-----						
38402	208 294	0.003	0.10	-----	-----						
38403	208 294	0.001	0.03	-----	-----						
38404	208 294	< 0.001	< 0.03	-----	-----						
38405	208 294	0.001	0.03	-----	-----						
38406	208 294	0.002	0.07	-----	-----						
38407	208 294	0.002	0.07	-----	-----						
38408	208 294	< 0.001	< 0.03	-----	-----						
38409	208 294	< 0.001	< 0.03	-----	-----						
38410	208 294	< 0.001	< 0.03	-----	-----						
38411	208 294	< 0.001	< 0.03	-----	-----						
38412	208 294	< 0.001	< 0.03	-----	-----						
38413	208 294	< 0.001	< 0.03	-----	-----						
38414	208 294	< 0.001	< 0.03	-----	-----						
38415	208 294	0.029	1.23	0.042	1.44						
38416	208 294	0.004	0.14	-----	-----						
38417	208 294	< 0.001	< 0.03	-----	-----						
38418	208 294	< 0.001	< 0.03	-----	-----						
38419	208 294	< 0.001	< 0.03	-----	-----						
38420	208 294	< 0.001	< 0.03	-----	-----						
38421	208 294	< 0.001	< 0.03	-----	-----						
38422	208 294	0.024	0.82	-----	-----						
38423	208 294	< 0.001	< 0.03	-----	-----						
38424	208 294	< 0.001	< 0.03	-----	-----						
38425	208 294	0.005	0.17	-----	-----						
38426	208 294	0.001	0.03	-----	-----						
38427	208 294	< 0.001	< 0.03	-----	-----						
38428	208 294	0.004	0.14	-----	-----						
38429	208 294	< 0.001	< 0.03	-----	-----						
38430	208 294	< 0.002	< 0.07	-----	-----						
38431	208 294	< 0.001	< 0.03	-----	-----						
38432	208 294	< 0.001	< 0.03	-----	-----						
38433	208 294	< 0.001	< 0.03	-----	-----						
38434	208 294	0.002	0.07	-----	-----						
38435	208 294	< 0.001	< 0.03	-----	-----						
38436	208 294	0.001	0.03	-----	-----						
38437	208 294	0.059	2.40	0.081	2.78						
38438	208 294	0.001	0.03	-----	-----						
38439	208 294	0.005	0.17	-----	-----						
38440	208 294	0.001	0.03	-----	-----						

CERTIFICATION:

W. Blinman



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
450 Matheson Blvd., E., Unit 54, Mississauga,
Ontario, Canada L4Z 1R5
PHONE: 416-890-0310

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
TORONTO, ON
M5H 1T1

Page Number : 2
Total Pages : 2
Invoice Date: 27-JUN-90
Invoice No. : I-9017281
P.O. Number :

Project : 5808
Comments: ATTN: JIM PIRIE CC: DUNCAN McIVOR

CERTIFICATE OF ANALYSIS A9017281

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA oz/T	Au FA g/tonne						
38441	208 294	< 0.001	< 0.03	-----	-----						
38442	208 294	< 0.001	< 0.03	-----	-----						
38443	208 294	< 0.001	< 0.03	-----	-----						
38444	208 294	< 0.001	< 0.03	-----	-----						
38445	208 294	< 0.001	< 0.03	-----	-----						
38446	208 294	< 0.001	< 0.03	-----	-----						
38447	208 294	0.004	0.14	-----	-----						
38448	208 294	< 0.001	< 0.03	-----	-----						

CERTIFICATION: W. Santamaria



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
450 Matheson Blvd., E., Unit 54, Mississauga,
Ontario, Canada L4Z 1R5
PHONE: 416-890-0310

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
TORONTO, ON
M5H 1T1

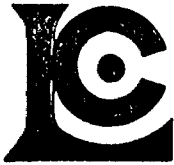
Project: 5608
Comments: ATTN: J. PIRIE CC: D. McIVOR

Page Number: 1
Total Pages: 3
Invoice Date: 17-AUG-90
Invoice No.: I-9020594
P.O. Number:

CERTIFICATE OF ANALYSIS A9020594

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA oz/T	Au FA g/tonne						
39001	208 272	0.003	0.10	-----	-----						
39002	208 272	0.001	0.03	-----	-----						
39003	208 272	< 0.001	< 0.03	-----	-----						
39004	208 272	< 0.001	< 0.03	-----	-----						
39005	208 272	< 0.001	< 0.03	-----	-----						
39006	208 272	< 0.001	< 0.03	-----	-----						
39007	208 272	< 0.001	< 0.03	-----	-----						
39008	208 272	< 0.001	< 0.03	-----	-----						
39009	208 272	< 0.001	< 0.03	-----	-----						
39010	208 272	< 0.001	< 0.03	-----	-----						
39011	208 272	0.001	0.03	-----	-----						
39012	208 272	< 0.001	< 0.03	-----	-----						
39013	208 272	< 0.001	< 0.03	-----	-----						
39014	208 272	< 0.001	< 0.03	-----	-----						
39015	208 272	< 0.001	< 0.03	-----	-----						
39016	208 272	0.001	0.03	-----	-----						
39017	208 272	0.001	0.03	-----	-----						
39018	208 272	< 0.001	< 0.03	-----	-----						
39019	208 272	< 0.001	< 0.03	-----	-----						
39020	208 272	0.001	0.03	-----	-----						
39030	208 272	0.001	0.03	-----	-----						
39031	208 272	0.001	0.03	-----	-----						
39032	208 272	0.002	0.07	-----	-----						
39033	208 272	0.001	0.03	-----	-----						
39034	208 272	0.001	0.03	-----	-----						
39035	208 272	< 0.001	< 0.03	-----	-----						
39036	208 272	< 0.001	< 0.03	-----	-----						
39050	208 272	< 0.001	< 0.03	-----	-----						
39069	208 272	0.001	0.03	-----	-----						
39070	208 272	< 0.001	< 0.03	-----	-----						
39071	208 272	< 0.001	< 0.03	-----	-----						
39072	208 272	< 0.001	< 0.03	-----	-----						
39073	208 272	< 0.001	< 0.03	-----	-----						
39074	208 272	0.001	0.03	-----	-----						
39075	208 272	< 0.001	< 0.03	-----	-----						
39076	208 272	< 0.001	< 0.03	-----	-----						
39077	208 272	< 0.001	< 0.03	-----	-----						
39078	208 272	< 0.001	< 0.03	-----	-----						
39079	208 272	< 0.001	< 0.03	-----	-----						
39080	208 272	< 0.001	< 0.03	-----	-----						

CERTIFICATION: *W. S. [Signature]*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
450 Matheson Blvd., E., Unit 54, Mississauga,
Ontario, Canada L4Z 1R5
PHONE: 416-890-0310

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
TORONTO, ON
M5H 1T1

Page Number : 2
Total Pages : 3
Invoice Date : 17-AUG-90
Invoice No. : I-9020594
P.O. Number :

Project : 5608
Comments : ATTN: J. PIRIE CC: D. McIVOR

CERTIFICATE OF ANALYSIS

A9020594

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA oz/T	Au FA g/tonne						
39081	208 272	< 0.001	< 0.03	-----	-----						
39082	208 272	< 0.001	< 0.03	-----	-----						
39083	208 272	< 0.001	< 0.03	-----	-----						
39084	208 272	< 0.001	< 0.03	-----	-----						
39084A	208 272	< 0.001	< 0.03	-----	-----						
39085	208 272	0.003	0.10	-----	-----						
39086	208 272	0.051	1.75	0.053	1.82						
39087	208 272	< 0.001	< 0.03	-----	-----						
39088	208 272	0.001	0.03	-----	-----						
39089	208 272	< 0.001	< 0.03	-----	-----						
39090	208 272	< 0.001	< 0.03	-----	-----						
39091	208 272	< 0.001	< 0.03	-----	-----						
39092	208 272	< 0.001	< 0.03	-----	-----						
39093	208 272	< 0.001	< 0.03	-----	-----						
39094	208 272	< 0.001	< 0.03	-----	-----						
39095	208 272	< 0.001	< 0.03	-----	-----						
39096	208 272	< 0.001	< 0.03	-----	-----						
39097	208 272	0.006	0.21	-----	-----						
39098	208 272	< 0.001	< 0.03	-----	-----						
39099	208 272	0.001	0.03	-----	-----						
39100	208 272	< 0.001	< 0.03	-----	-----						
39101	208 272	< 0.001	< 0.03	-----	-----						
39102	208 272	< 0.001	< 0.03	-----	-----						
39103	208 272	< 0.001	< 0.03	-----	-----						
39104	208 272	< 0.001	< 0.03	-----	-----						
39105	208 272	0.002	0.07	-----	-----						
39106	208 272	< 0.001	< 0.03	-----	-----						
39107	208 272	< 0.001	< 0.03	-----	-----						
39108	208 272	< 0.001	< 0.03	-----	-----						
39109	208 272	< 0.001	< 0.03	-----	-----						
39110	208 272	< 0.001	< 0.03	-----	-----						
39111	208 272	< 0.001	< 0.03	-----	-----						
39112	208 272	< 0.001	< 0.03	-----	-----						
39113	208 272	< 0.001	< 0.03	-----	-----						
39114	208 272	< 0.001	< 0.03	-----	-----						
39115	208 272	0.018	0.62	-----	-----						
39116	208 272	< 0.001	< 0.03	-----	-----						
39117	208 272	< 0.001	< 0.03	-----	-----						
39118	208 272	< 0.001	< 0.03	-----	-----						
39119	208 272	< 0.001	< 0.03	-----	-----						

CERTIFICATION:

W. J. Pirie



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
450 Matheson Blvd., E., Unit 54, Mississauga,
Ontario, Canada L4Z 1R5
PHONE: 416-890-0310

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
TORONTO, ON
M5H 1T1

Page Number : 3
Total Pages : 3
Invoice Date : 17-AUG 90
Invoice No. : I-9020594
P.O. Number :

Project : 5608

Comments : ATTN: J. PIRIE CC: D. McIVOR

CERTIFICATE OF ANALYSIS

A9020594

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA oz/T	Au FA g/tonne						
39120	208 272	< 0.001	< 0.03	-----	-----						
39121	208 272	< 0.001	< 0.03	-----	-----						
39122	208 272	< 0.001	< 0.03	-----	-----						
39123	208 272	< 0.001	< 0.03	-----	-----						
39124	208 272	< 0.001	< 0.03	-----	-----						
39125	208 272	< 0.001	< 0.03	-----	-----						
39126	208 272	< 0.001	< 0.03	-----	-----						
39127	208 272	< 0.001	< 0.03	-----	-----						
39128	208 272	0.002	0.07	-----	-----						
39129	208 272	< 0.001	< 0.03	-----	-----						
39130	208 272	< 0.001	< 0.03	-----	-----						
39131	208 272	< 0.001	< 0.03	-----	-----						
39132	208 272	< 0.001	< 0.03	-----	-----						
39133	208 272	0.004	0.14	-----	-----						
39134	208 272	0.007	0.24	-----	-----						
39135	208 272	< 0.001	< 0.03	-----	-----						
39136	208 272	< 0.001	< 0.03	-----	-----						
39137	208 272	< 0.001	< 0.03	-----	-----						
39138	208 272	0.001	0.03	-----	-----						
39139	208 272	0.004	0.14	-----	-----						
39140	208 272	< 0.001	< 0.03	-----	-----						
39141	208 272	< 0.001	< 0.03	-----	-----						
39142	208 272	< 0.001	< 0.03	-----	-----						
39143	208 272	< 0.001	< 0.03	-----	-----						
39144	208 272	< 0.001	< 0.03	-----	-----						
39145	208 272	< 0.001	< 0.03	-----	-----						
39146	208 272	0.001	0.03	-----	-----						
39316	208 272	0.008	0.27	-----	-----						
39317	208 272	0.001	0.03	-----	-----						
39324	208 272	0.006	0.21	-----	-----						
39325	208 272	0.013	0.45	-----	-----						

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number: 1
 Total Pages: 3
 Invoice Date: 28-AUG-90
 Invoice No.: I-9021136
 P.O. Number:

Project: 5608
 Comments: ATTN: J. PIRIE CC: D. MCIVOR

CERTIFICATE OF ANALYSIS A9021136

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA g/tonne	Au FA oz/T						
39021	208 272	< 0.001	< 0.03	----	----						
39022	208 272	< 0.001	< 0.03	----	----						
39023	208 272	< 0.001	< 0.03	----	----						
39024	208 272	< 0.001	< 0.03	----	----						
39025	208 272	< 0.001	< 0.03	----	----						
39026	208 272	< 0.001	< 0.03	----	----						
39027	208 272	< 0.001	< 0.03	----	----						
39028	208 272	< 0.001	< 0.03	----	----						
39029	208 272	< 0.001	< 0.03	----	----						
39039	208 272	< 0.001	< 0.03	----	----						
39040	208 272	< 0.001	< 0.03	----	----						
39041	208 272	< 0.001	< 0.03	----	----						
39042	208 272	< 0.001	< 0.03	----	----						
39043	208 272	< 0.001	< 0.03	----	----						
39044	208 272	< 0.001	< 0.03	----	----						
39044/ 9045	208 272	< 0.001	< 0.03	----	----						
39045	208 272	< 0.001	< 0.03	----	----						
39046	208 272	< 0.001	< 0.03	----	----						
39047	208 272	< 0.001	< 0.03	----	----						
39048	208 272	< 0.001	< 0.03	----	----						
39049	208 272	< 0.001	< 0.03	----	----						
39051	208 272	< 0.001	< 0.03	----	----						
39052	208 272	< 0.001	< 0.03	----	----						
39053	208 272	< 0.001	< 0.03	----	----						
39054	208 272	< 0.001	< 0.03	----	----						
39055	208 272	0.003	0.10	----	----						
39056	208 272	< 0.001	< 0.03	----	----						
39057	208 272	0.003	0.10	----	----						
39058	208 272	< 0.001	< 0.03	----	----						
39059	208 272	< 0.001	< 0.03	----	----						
39060	208 272	< 0.001	< 0.03	----	----						
39061	208 272	< 0.001	< 0.03	----	----						
39062	208 272	< 0.001	< 0.03	----	----						
39063	208 272	< 0.001	< 0.03	----	----						
39064	208 272	< 0.001	< 0.03	----	----						
39065	208 272	< 0.001	< 0.03	----	----						
39066	208 272	< 0.001	< 0.03	----	----						
39067	208 272	< 0.001	< 0.03	----	----						
39147	208 272	< 0.001	< 0.03	----	----						
39148	208 272	< 0.001	< 0.03	----	----						



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number : 2
 Total Pages : 3
 Invoice Date: 26-AUG-90
 Invoice No. : I-9021136
 P.O. Number :

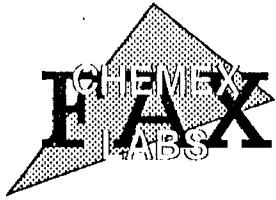
Project : 5608
 Comments : ATTN: J. PIRIE CC: D. MCIVOR

CERTIFICATE OF ANALYSIS

A9021136

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA g/tonne	Au FA oz/T						
39149	208 272	< 0.001	< 0.03	-----	-----						
39150	208 272	< 0.001	< 0.03	-----	-----						
39151	208 272	< 0.001	< 0.03	-----	-----						
39152	208 272	< 0.001	< 0.03	-----	-----						
39153	208 272	< 0.001	< 0.03	-----	-----						
39154	208 272	< 0.001	< 0.03	-----	-----						
39155	208 272	< 0.001	< 0.03	-----	-----						
39156	208 272	< 0.001	< 0.03	-----	-----						
39157	208 272	0.034	1.16	1.10	0.032						
39158	208 272	< 0.001	< 0.03	-----	-----						
39159	208 272	< 0.001	< 0.03	-----	-----						
39160	208 272	< 0.001	< 0.03	-----	-----						
39161	208 272	0.002	0.07	-----	-----						
39162	208 272	< 0.001	< 0.03	-----	-----						
39163	208 272	0.001	0.03	-----	-----						
39164	208 272	0.028	0.96	-----	-----						
39165	208 272	0.060	2.06	2.43	0.071						
39166	208 272	0.019	0.65	-----	-----						
39167	208 272	< 0.001	< 0.03	-----	-----						
39168	208 272	0.001	0.03	-----	-----						
39169	208 272	< 0.001	< 0.03	-----	-----						
39170	208 272	0.005	0.17	-----	-----						
39171	208 272	< 0.001	< 0.03	-----	-----						
39172	208 272	0.002	0.07	-----	-----						
39173	208 272	< 0.001	< 0.03	-----	-----						
39174	208 272	< 0.001	< 0.03	-----	-----						
39175	208 272	< 0.001	< 0.03	-----	-----						
39176	208 272	< 0.001	< 0.03	-----	-----						
39177	208 272	0.034	1.16	1.06	0.031						
39178	208 272	0.001	0.03	-----	-----						
39179	208 272	0.003	0.10	-----	-----						
39180	208 272	0.001	0.03	-----	-----						
39181	208 272	< 0.001	< 0.03	-----	-----						
39182	208 272	< 0.001	< 0.03	-----	-----						
39183	208 272	< 0.001	< 0.03	-----	-----						
39184	208 272	< 0.001	< 0.03	-----	-----						
39185	208 272	< 0.001	< 0.03	-----	-----						
39186	208 272	< 0.001	< 0.03	-----	-----						
39187	208 272	< 0.001	< 0.03	-----	-----						
39188	208 272	< 0.001	< 0.03	-----	-----						

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2G1
 PHONE: 604-984-0221

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1312 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number : 3
 Total Pages : 3
 Invoice Date: 26-AUG-90
 Invoice No. : I-9021136
 P.O. Number :

Project : 5608
 Comments: ATTN: J. PIRIE CC: D. MCIVOR

CERTIFICATE OF ANALYSIS A9021136

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne	Au FA g/tonne	Au FA oz/T						
39189	208 272	< 0.001	< 0.03	----	----						
39190	208 272	< 0.001	< 0.03	----	----						
39191	208 272	< 0.001	< 0.03	----	----						
39192	208 272	< 0.001	< 0.03	----	----						
39193	208 272	< 0.001	< 0.03	----	----						
39194	208 272	< 0.001	< 0.03	----	----						
39195	208 272	< 0.001	< 0.03	----	----						
39196	208 272	< 0.001	< 0.03	----	----						
39197	208 272	< 0.001	< 0.03	----	----						
39198	208 272	< 0.001	< 0.03	----	----						
39199	208 272	< 0.001	< 0.03	----	----						
39200	208 272	< 0.001	< 0.03	----	----						
39201	208 272	< 0.001	< 0.03	----	----						
39202	208 272	< 0.001	< 0.03	----	----						
39203	208 272	0.001	0.03	----	----						
39204	208 272	< 0.001	< 0.03	----	----						
39205	208 272	< 0.001	< 0.03	----	----						
39206	208 272	< 0.001	< 0.03	----	----						
39318	208 272	< 0.001	< 0.03	----	----						
39319	208 272	0.001	0.03	----	----						
39320	208 272	0.001	0.03	----	----						
39321	208 272	< 0.001	< 0.03	----	----						
39322	208 272	< 0.001	< 0.03	----	----						
39323	208 272	< 0.001	< 0.03	----	----						



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY

1812 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number: 1
 Total Pages: 3
 Invoice Date: 04-SEP-90
 Invoice No.: I-9021662
 P.O. Number:

Project: 5608
 Comments: ATTN: J. PIRIE CC: D. MCIVOR

CERTIFICATE OF ANALYSIS A9021662

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/Tonne									
39207	208 272	< 0.001	< 0.03									
39208	208 272	< 0.001	< 0.03									
39209	208 272	< 0.001	< 0.03									
39210	208 272	< 0.001	< 0.03									
39211	208 272	< 0.001	< 0.03									
39212	208 272	< 0.001	< 0.03									
39213	208 272	< 0.001	< 0.03									
39214	208 272	< 0.001	< 0.03									
39215	208 272	< 0.001	< 0.03									
39216	208 272	< 0.001	< 0.03									
39217	208 272	< 0.001	< 0.03									
39218	208 272	< 0.001	< 0.03									
39219	208 272	< 0.001	< 0.03									
39220	208 272	< 0.001	< 0.03									
39221	208 272	< 0.001	< 0.03									
39222	208 272	< 0.001	< 0.03									
39223	208 272	< 0.001	< 0.03									
39224	208 272	< 0.001	< 0.03									
39225	208 272	< 0.001	< 0.03									
39226	208 272	< 0.001	< 0.03									
39227	208 272	< 0.001	< 0.03									
39228	208 272	< 0.001	< 0.03									
39229	208 272	< 0.001	< 0.03									
39230	208 272	< 0.001	< 0.03									
39231	208 272	< 0.001	< 0.03									
39232	208 272	< 0.001	< 0.03									
39233	208 272	< 0.001	< 0.03									
39234	208 272	< 0.001	< 0.03									
39235	208 272	< 0.001	< 0.03									
39236	208 272	< 0.001	< 0.03									
39237	208 272	< 0.001	< 0.03									
39238	208 272	< 0.001	< 0.03									
39239	208 272	< 0.001	< 0.03									
39240	208 272	< 0.001	< 0.03									
39241	208 272	< 0.001	< 0.03									
39242	208 272	< 0.001	< 0.03									
39243	208 272	< 0.001	< 0.03									
39244	208 272	< 0.001	< 0.03									
39245	208 272	< 0.001	< 0.03									
39246	208 272	< 0.001	< 0.03									



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY
 1812 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number: 2
 Total Pages: 3
 Invoice Date: 04-SEP-90
 Invoice No.: I-9021662
 P.O. Number:

Project: 5608
 Comments: ATTN: J. PIRIE CC: D. MCIVOR

CERTIFICATE OF ANALYSIS A9021662

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne										
39247	208 272	< 0.001	< 0.03										
39248	208 272	< 0.001	< 0.03										
39249	208 272	< 0.001	< 0.03										
39250	208 272	0.004	0.17										
39251	208 272	< 0.001	< 0.03										
39252	208 272	< 0.001	< 0.03										
39253	208 272	< 0.001	< 0.03										
39254	208 272	< 0.001	< 0.03										
39255	208 272	< 0.001	< 0.03										
39256	208 272	< 0.001	< 0.03										
39257	208 272	< 0.001	< 0.03										
39258	208 272	< 0.001	< 0.03										
39259	208 272	< 0.001	< 0.03										
39260	208 272	< 0.001	< 0.03										
39261	208 272	< 0.001	< 0.03										
39262	208 272	< 0.001	< 0.03										
39263	208 272	< 0.001	< 0.03										
39264	208 272	< 0.001	< 0.03										
39265	208 272	< 0.001	< 0.03										
39266	208 272	< 0.001	< 0.03										
39267	208 272	0.001	0.03										
39268	208 272	0.001	0.03										
39269	208 272	0.001	0.03										
39270	208 272	0.001	0.03										
39271	208 272	0.003	0.10										
39272	208 272	0.007	0.24										
39273	208 272	0.006	0.21										
39274	208 272	0.001	0.03										
39275	208 272	< 0.001	< 0.03										
39276	208 272	< 0.001	< 0.03										
39277	208 272	< 0.001	< 0.03										
39278	208 272	< 0.001	< 0.03										
39279	208 272	< 0.001	< 0.03										
39280	208 272	< 0.001	< 0.03										
39281	208 272	< 0.001	< 0.03										
39282	208 272	< 0.001	< 0.03										
39283	208 272	< 0.001	< 0.03										
39284	208 272	< 0.001	< 0.03										
39285	208 272	< 0.001	< 0.03										
39286	208 272	< 0.001	< 0.03										



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: HOMESTAKE MINERAL DEVELOPMENT COMPANY
 1812 - 120 ADELAIDE ST., W.
 TORONTO, ON
 M5H 1T1

Page Number: 3
 Total Pages: 3
 Invoice Date: 04-SEP-90
 Invoice No.: I-9021662
 P.O. Number:

Project: 5808
 Comments: ATTN: J. PIRIE CC: D. MCIVOR

CERTIFICATE OF ANALYSIS A9021662

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Au g/tonne										
39287	208 272	< 0.001	< 0.03										
39288	208 272	< 0.001	< 0.03										
39289	208 272	< 0.001	< 0.03										
39290	208 272	< 0.001	< 0.03										
39291	208 272	< 0.001	< 0.03										
39292	208 272	< 0.001	< 0.03										
39293	208 272	< 0.001	< 0.03										
39294	208 272	< 0.001	< 0.03										
39295	208 272	0.001	0.03										
39296	208 272	< 0.001	< 0.03										
39297	208 272	0.003	0.10										
39298	208 272	< 0.001	< 0.03										
39299	208 272	< 0.001	< 0.03										
39300	208 272	< 0.001	< 0.03										
39301	208 272	< 0.001	< 0.03										
39302	208 272	< 0.001	< 0.03										
39303	208 272	< 0.001	< 0.03										
39304	208 272	< 0.001	< 0.03										
39305	208 272	< 0.001	< 0.03										
39306	208 272	< 0.001	< 0.03										
39307	208 272	< 0.001	< 0.03										
39308	208 272	< 0.001	< 0.03										
39309	208 272	< 0.001	< 0.03										
39310	208 272	< 0.001	< 0.03										
39311	208 272	< 0.001	< 0.03										
39312	208 272	< 0.001	< 0.03										
39313	208 272	0.013	0.45										
39314	208 272	0.001	0.03										
39315	208 272	< 0.001	< 0.03										

CERTIFICATION:



MIN EN LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

REC
JUN 7 1990
MINERALS

INVOICE

TO : HOMESTAKE MIN. DEV. CO.

1812-120 ADELAIDE ST. W.,
TORONTO, ONT.
M5H 1T1

INVOICE No 16696D
PAGE : 1 OF 1
DATE : Jun 02/90

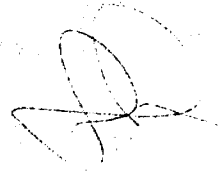
ACCOUNT: 15850

ATTENTION: J. PIRIE/D. MCIVOR
PROJECT: 5608

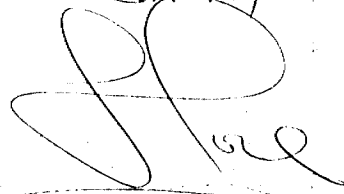
FILE No: OB-62

QTY DESCRIPTION	UNIT PRICE	AMOUNT
48 ROCK GEOCHEM - 31 ELEMENT TRACE ICP	6.00	288.00
48 ROCK GEOCHEM - AU FIRE	7.25	348.00
48 ROCK SAMPLE PREP	3.75	180.00
	* TOTAL *	816.00

THESE ARE PROFESSIONAL SERVICES AND ARE PAYABLE WHEN RENDERED.
OUTSTANDING BALANCES OVER 30 DAYS WILL BE CHARGED 2% INTEREST/MONTH.

HMDC 
10:5608 105 \$816.00

I CERTIFY THAT THIS HAS BEEN PAID IN FULL
BY HOMESTAKE MINERAL DEVELOPMENT COMPANY


RECEIVED

MAR 04 1991

MINING LANDS SECTION

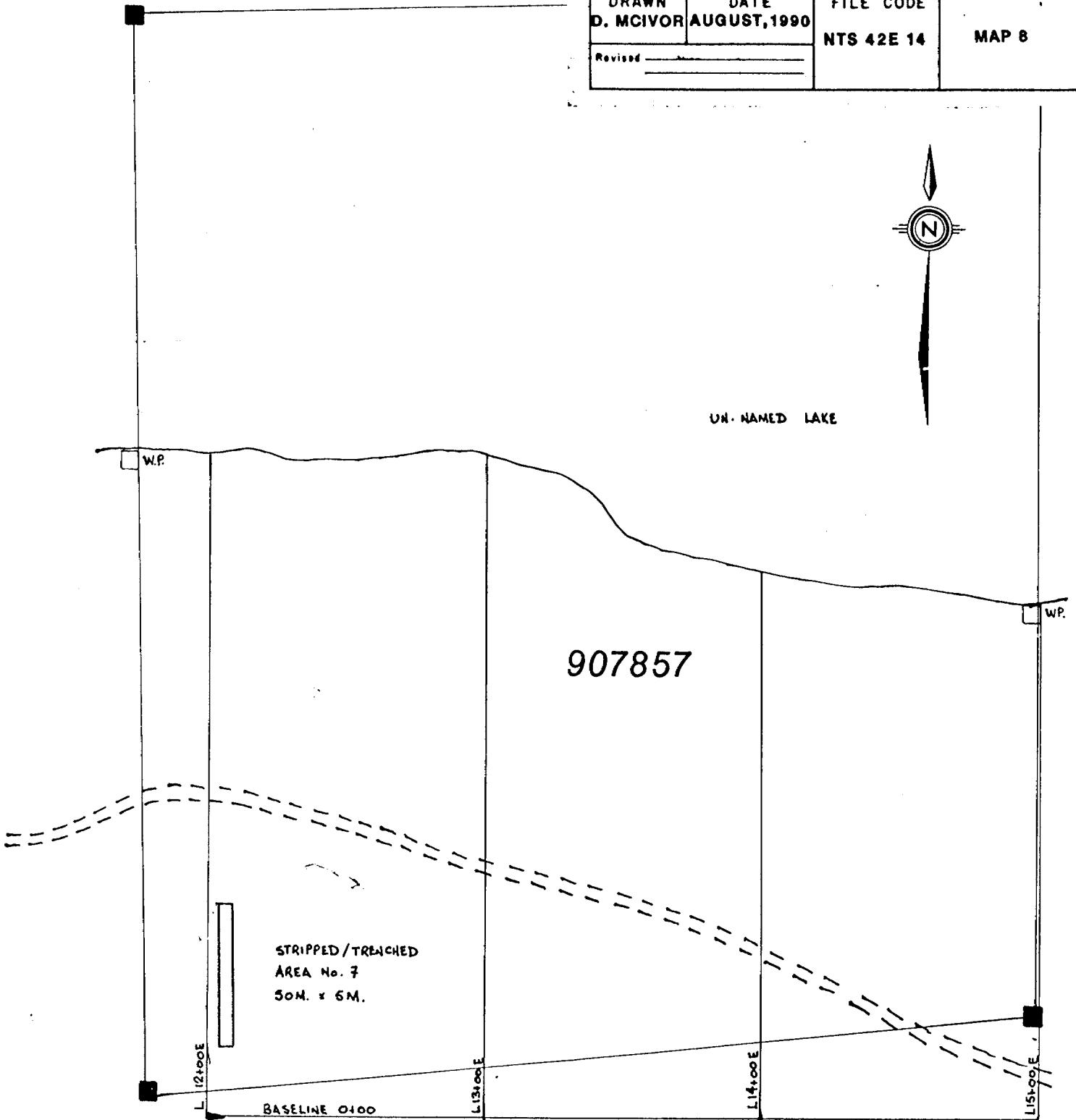
HOMESTAKE
MINERAL DEVELOPMENT COMPANY

MISSING LINK PROPERTY
LOCATION MAP
STRIPPED AREA NUMBER 7

DRAWN D. MCIVOR	DATE AUGUST, 1990	FILE CODE NTS 42E 14	MAP 8
Revised _____			



UN-NAMED LAKE



907857

STRIPPED/TRENCHED
AREA No. 7
50M. x 5M.

BASELINE 0100



0 20 40 60 80 100

METRES

1: 2000

907512

STRIPPED/
TRENCHED AREA
No. 8
50 M. x 5 M.



KINGHORN ROAD

KINGHORN ROAD



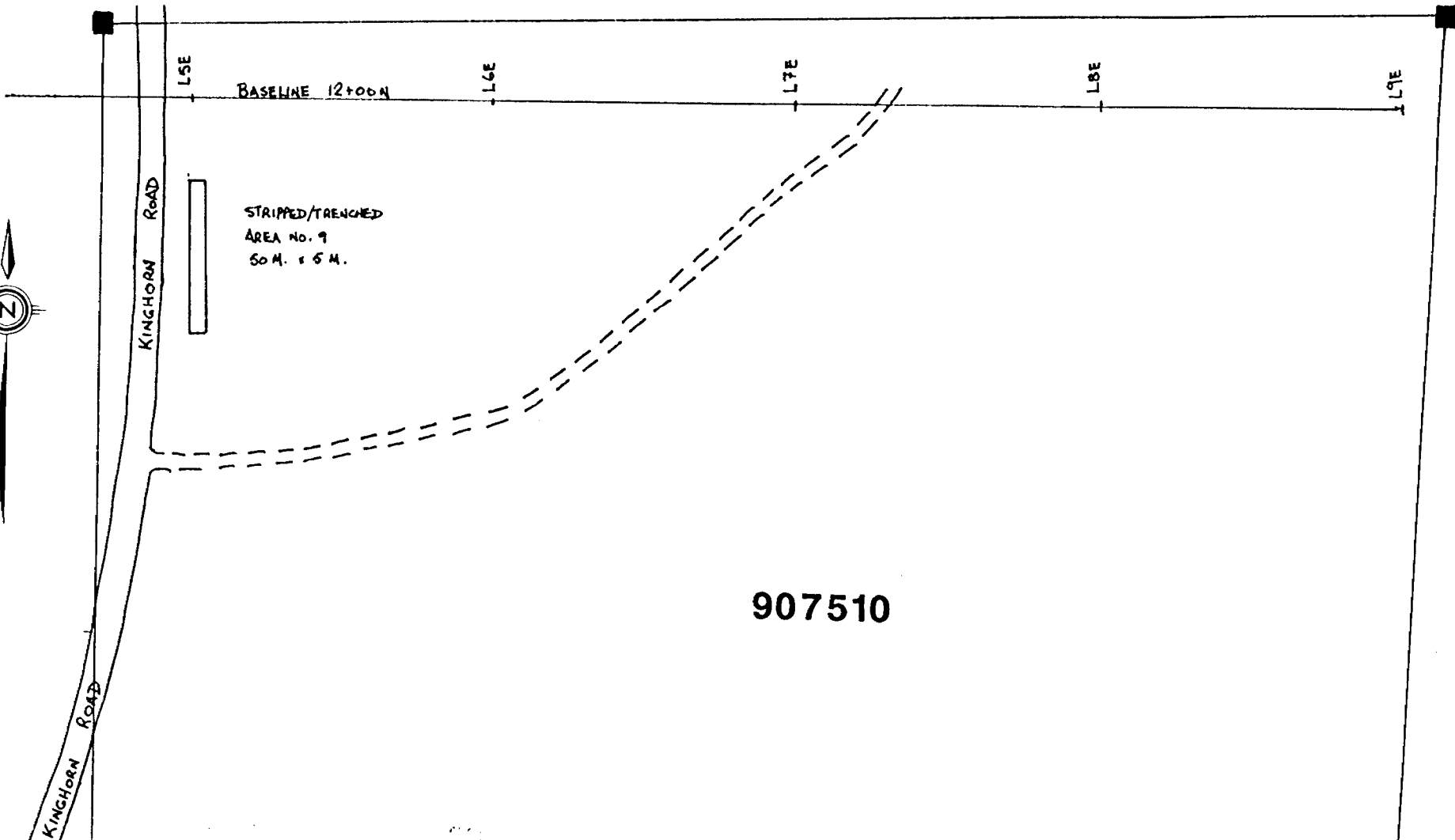
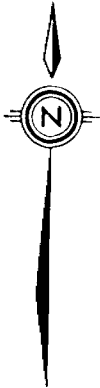
HOMESTAKE MINERAL DEVELOPMENT COMPANY			
MISSING LINK PROPERTY LOCATION MAP STRIPPED AREA NUMBER 8			
DRAWN D.MCIVOR	DATE AUGUST, 1990	FILE CODE MAP 9	NTS 42E 14
Revised _____			

L1

L2+00E

L3+00E

L4+00E



HOMESTAKE
MINERAL DEVELOPMENT COMPANY



MISSING LINK PROPERTY

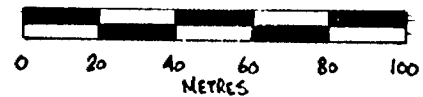
LOCATION MAP

STRIPPED AREA NUMBER 9

DRAWN D.MCIVOR	DATE AUGUST, 1990	FILE CODE NTS 42E 14	MAP 10
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Revised _____

1:2000





Mining Act **Report of Work** **2.13579**
(Expenditures, Subsection 77(19))

should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Type of Work Performed ASSAYS & ANALYSES 2.13579	Mining Division THUNDER BAY	Township or Area LAPIERRE & LEGAULT
Recorded Holder (E 25772) (A 39226) (E 32096) (E 32136) NOLAN COX, MAC WATSON, M. J. HULL & M. J. MALSSENCHUK	Prospector's Licence No.	
Address PO Box 207 BOARDMORE ONT POT 1GC		Telephone No.
Work Performed By HUMESTAKE MINERAL DEVELOPMENT COMPANY - J PIRIE		
Name and Address of Author (of Submission) SUITE 2116 - 120 ADOLPHE STREET WEST TORONTO ONT M5H 1T1		Date When Work was Performed From: 15 04 90 To: 15 06 90 Day Mo Yr Day Mo Yr

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. *See Note No. 1 on reverse side											
Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days
907878	7.77	907875	7.77	907874	7.77						
	9.06		9.06								

Instructions Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).	Calculation of Expenditure Days Credits		Total Number of Mining Claims Covered by this Report of Work 76
	Total Expenditures \$ 816⁰⁰	Total Days Credits 15 = 54.4	

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
TB	907881	2.4									

RECEIVED

MAR 04 1991

MINING LANDS SECTION

Total Number of Days Performed 54.4	Total Number of Days Claimed 2.4	Total Number of Days to be Claimed at a Future Date 52
---	--	--

Certification of Beneficial Interest *See Note No. 2 on reverse side

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.

Date: **17 Feb 1991** Recorded Holder or Agent (Signature): *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Address of Person Certifying
J PIRIE HUMESTAKE M D C. SUITE 2116 - 120 ADOLPHE ST WEST TORONTO ONT M5H 1T1

Telephone No. **(416) 366-4432** Date **15 Feb 1991** Certified By (Signature): *[Signature]*

* Assignment (over)
For Office Use Only

Total Days Cr. Recorded 54.4	Date Recorded Feb 14/91	Mining Reporter <i>[Signature]</i>
Date Approved as Recorded March 05/91	Provincial Manager, Mining Lands <i>[Signature]</i>	

RECEIVED

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES

APR 05 1991

RECEIVED



DOCUMENT No. W9004-386

- Mining Lands*
- Instructions
 - Please type or print.
 - Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
 - If number of mining claims traversed exceeds space on this form attach a list.
 - Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch:
- Sept 15 Oct 15*

Report of Work **2, 135 79**
(Geophysical, Geological and Geochemical Surveys)

g Act

Type of Survey(s) **GEOLOGICAL 2, 135 79** Mining Division **THUNDER BAY** Township or Area **C-65 LAPIERRE & LEGAULT TOWNSHIPS**

Recorded Holder(s) **HOMESTAKE MINERAL DEVELOPMENT COMPANY** Prospector's Licence No. **T 1591**

Address **P.O. Box 290, TIMMINS, ONTARIO, P4N-7N6** Telephone No. **705-267-6680**

Survey Company **HOMESTAKE MINERAL DEVELOPMENT COMPANY**

Name and Address of Author (of Geo-Technical Report) **DUNCAN McIVOR c/o P.O. Box 290, TIMMINS, ONTARIO, P4N-7N6** Date of Survey (from & to) **20 05 90 01 08 90**
Day Mo Yr Day Mo Yr

Edits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey:	- Electromagnetic	
Enter 40 days (This includes line cutting)	- Magnetometer	
For each additional survey:	- Other	39.74
Using the same grid:	Geological	10
Enter 20 days (for each)	Geochemical	

Plan Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	Other	
	Geological	
	Geochemical	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
TB	907485	TB	907511	TB	907860
"	907486	"	907512	"	907861
"	907487	"	907513	"	907862
"	907488	"	907514	"	907867
"	907489	"	907515	"	907868
"	907490	"	907550	"	907869
"	907491	"	907851	"	907870
"	907492	"	907852	"	907871
"	907493	"	907853	"	907872
"	907494	"	907854	"	907873
"	907495	"	907855	"	907875
"	907496	"	907856	"	907876
"	907500	"	907857	"	907877
"	907507	"	907858	"	907878
"	907508	"	907859	"	907879
"	907509	CONTINUED ON ATTACHED LIST			
"	907510	Total number of mining claims covered by this report of work. 54			

Total miles flown over claim(s)

Date **August 03, 1990** Recorded Holder or Agent (Signature) *Duncan McIvor*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in this Report of Work, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying **DUNCAN McIVOR c/o P.O. Box 290, TIMMINS, ONTARIO, P4N-7N6**

Telephone No. **705-267-6680** Date **August 03, 1990** Certified By (Signature) *Duncan McIvor*

For Office Use Only *** Maximum Credits Reached**

Total Days Recorded **2146** Date Recorded **Aug 15/90** Mining Recorder *[Signature]*

Date Approved as Recorded *[Signature]* Provincial Manager, Mining Lands *See Revised work statement*

Received Stamp: **RECEIVED THUNDER BAY MINING DIVISION SEP 15 AM 11 03**

MINING CLAIM

TB 907880 "
" 907881 "
" 907882 "
" 907883 "
" 907884 "
" 907885 "
" 907890 "

RECEIVED
TENDER BAY
MINING DIVISION
'90 AUG 15 AM 11 04



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
159 Cedar Street, 4th Floor
SUDBURY, Ontario
P3E 6A5

Telephone: (705) 670-7264
Fax: (705) 670-7262

Your File: W9004.336
Our File : 2.13579

February 19, 1991

Mining Recorder
Ministry of Northern Development and Mines
435 James Street South
P.O. Box 5000
THUNDER BAY, Ontario
P7C 5G6

Dear Madam/Sir:

RE: Notice of Intent dated January 14, 1991 for Geological
Survey submitted on Mining Claim TB 907485 et al in
Lapierre & Legault Townships

The assessment work credits, as listed with the above
mentioned Notice of Intent have been approved as of the above
date.

Please inform the recorded holder of these mining claims and
so indicate on your records.

Yours sincerely

R. C. Gashinski
Provincial Manager, Mining Lands
Mines and Minerals Division

HJ/dvl

Enclosure

cc: Mr. W. D. Tieman
Mining and Lands Commissioner
Toronto, Ontario

Resident Geologist
Thunder Bay, Ontario

Homestake Mineral Development
Timmins, Ontario



AMENDED

Recorded Holder
Homestake Mineral Development Company

Township or Area
Lapierre & Legault Townships

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological <u>39.74</u> days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	TB 907485-487 incl. 907489-492 incl. 907495-496 907507-513 incl. 907851-852 907854-855 907862 907868 907870-873 incl. 907875 907878 907884-885 907890 NOTE: 39.74 was maximum allowable

Special credits under section 77 (16) for the following mining claims

30 days on TB 907488, 907494, 907500, 907514-515, 907853, 907858-861 incl.
 907867, 907869, 907877, 907880-882 incl.

20 days on TB 907493, 907856-857, 907876, 907883

10 days on 907550, 907879

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

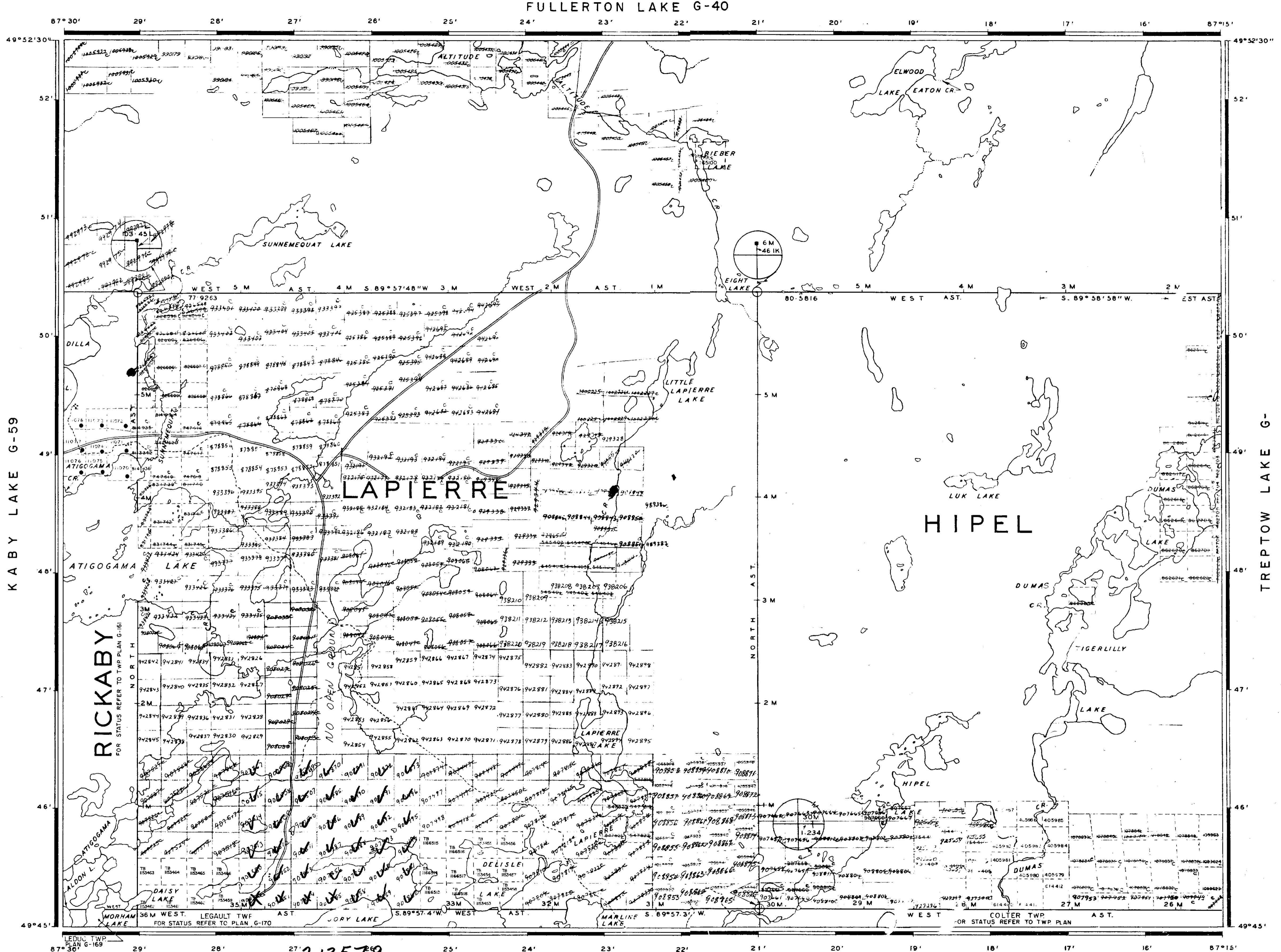
REFERENCES

SURVEYS:-

SOUTH BOUNDARY OF HIPEL, LAPIERRE, RICKABY AND THE EAST BOUNDARY OF RICKABY TOWNSHIP SURVEYED BY H.W. SUTCLIFFE O.L.S. 1934 FIELD NOTE BOOK No 2580

NORTH BOUNDARY OF LAPIERRE, HIPEL, AND THE WEST BOUNDARY OF HIPEL, AND COLTER TOWNSHIPS SURVEYED BY C.V. GALLAGHER O.L.S. 1935 FIELD NOTE BOOK No 2378

EAST BOUNDARY OF LEDUC AND THE NORTH BOUNDARY OF RICKABY TOWNSHIPS SURVEYED BY J.M. KILKENNY O.L.S. 1935 FIELD NOTE BOOK No 2394



91 FEB 22 AM 10:00

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOP.



TOPOGRAPHY
LAKES, RIVERS, ETC., FROM FOREST RESOURCES INVENTORY SHEET No. 497872

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
SURFACE RIGHTS ONLY	○
MINING RIGHTS ONLY	◐
LEASE SURFACE & MINING RIGHTS	■
SURFACE RIGHTS ONLY	◼
MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	▽
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊖
SAND & GRAVEL	⊗

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 300, SEC. 63, SUBSEC. 1.

LEGEND

PAVED ROAD	▬▬▬▬▬▬
GRAVEL ROAD	▬▬▬▬▬▬▬▬
OTHER ROADS	▬▬▬▬▬▬▬▬▬▬
TRAIL OR PATH	▬▬▬▬▬▬▬▬▬▬▬▬
HIGHWAY ROUTE No	▬▬▬▬▬▬▬▬▬▬▬▬
ELECTRIC POWER LINE	▬▬▬▬▬▬▬▬▬▬▬▬
TELEPHONE LINE	▬▬▬▬▬▬▬▬▬▬▬▬
RAILROAD & RIGHT OF WAY	▬▬▬▬▬▬▬▬▬▬▬▬
RAPIDS, PORTAGE	▬▬▬▬▬▬▬▬▬▬▬▬
NON-PERENNIAL STREAM	▬▬▬▬▬▬▬▬▬▬▬▬
EDGE OF CLEARING	▬▬▬▬▬▬▬▬▬▬▬▬
TREELESS MUSKOG OR MARSH	▬▬▬▬▬▬▬▬▬▬▬▬
BRIDGE, BUILDINGS	▬▬▬▬▬▬▬▬▬▬▬▬

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 2000 4000

AREA
LAPIERRE LAKE
M. N. R. ADMINISTRATIVE DISTRICT
NIPIGON - GERALDTON
MINING DIVISION
THUNDER BAY
LAND TAXES / REGISTRY DIVISION
THUNDER BAY

Ministry of Natural Resources
Land Management Branch
Ontario

Date JANUARY 1981
Number
G-65

2.13579
SOUTH OF LEGAULT TWP G-131

DISPOSITION OF CROWN LANDS

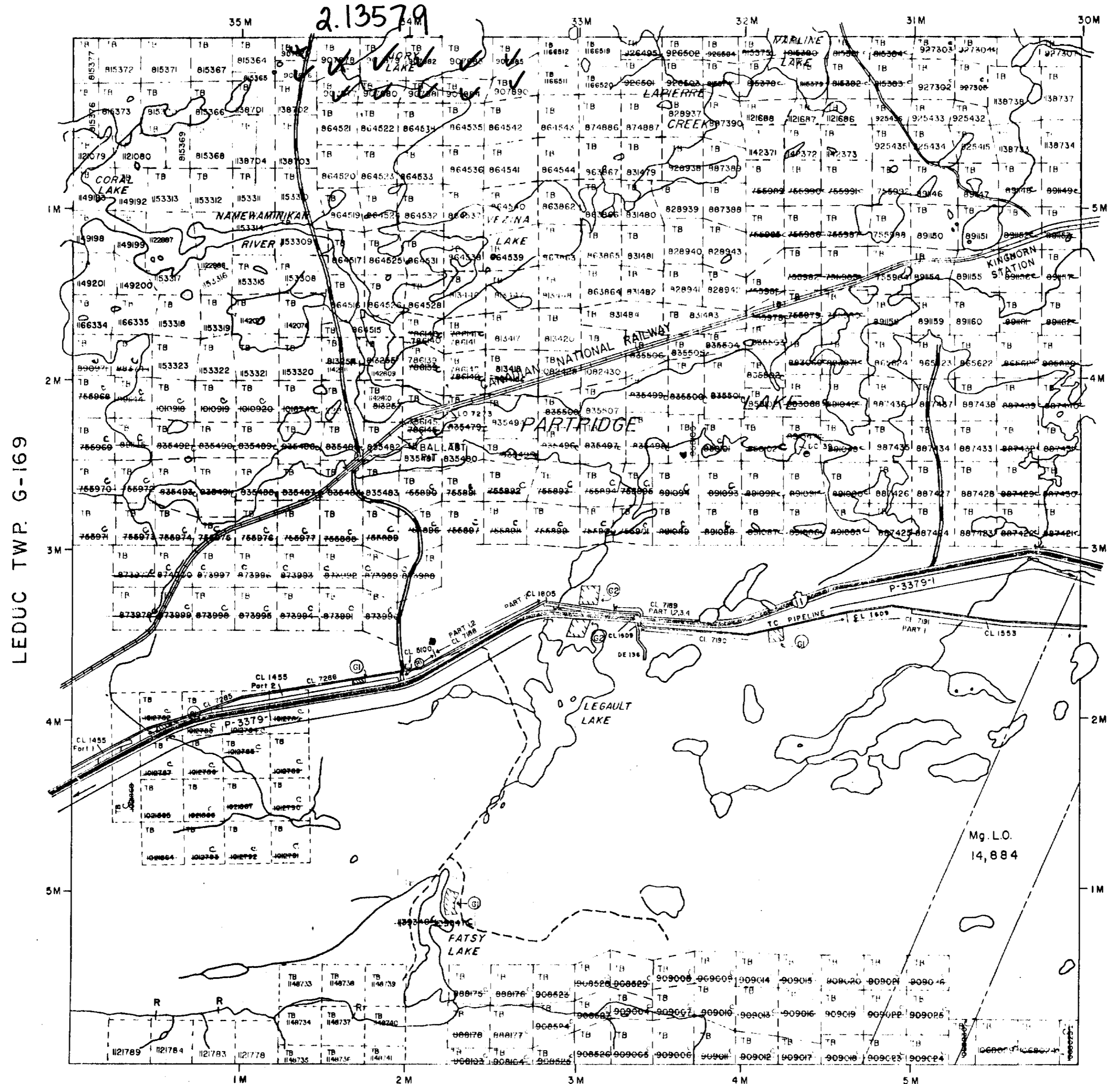
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	⊙
" SURFACE RIGHTS ONLY	⊖
" MINING RIGHTS ONLY	⊕
LEASE, SURFACE & MINING RIGHTS	⊞
" SURFACE RIGHTS ONLY	⊟
" MINING RIGHTS ONLY	⊠
LICENCE OF OCCUPATION	∇
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊚
SAND & GRAVEL	⊛

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

- ⊙ GRAVEL RESERVE
- ⊖ M.T.C. GRAVEL PIT NO. 2C-16
- ⊕ M.T.C. GRAVEL PIT NO. 2C-17
- ⊞ ORDER W 81/87 NCR SRO WITHDRAWN-SEE LEGAULT TWP LANDROLL

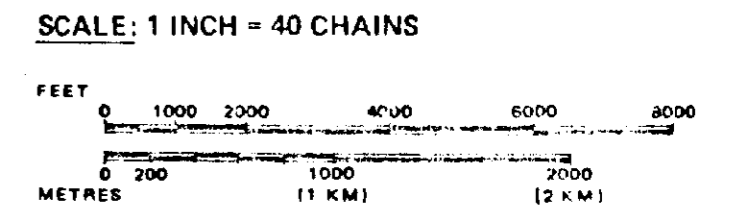
THUNDER BAY
 MINING DIVISION
 '91 FEB 22 AM 10 23

LAPIERRE TWP. G-65



LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT



TOWNSHIP
LEGAULT
 M.N.R. ADMINISTRATIVE DISTRICT
NIPIGON & GERALDTON
 MINING DIVISION
THUNDER BAY
 LAND TITLES / REGISTRY DIVISION
THUNDER BAY

Ministry of Natural Resources
 Land Management Branch
 Ontario

Date: FEBRUARY, 1981
 Number: **G-170**
 DATE: SEPTEMBER, 1989

WATER RIGHTS INFORMATION

WATER RIGHTS INFORMATION (continued)

PROPERTY INFORMATION

PROPERTY INFORMATION (continued)

ADDITIONAL INFORMATION

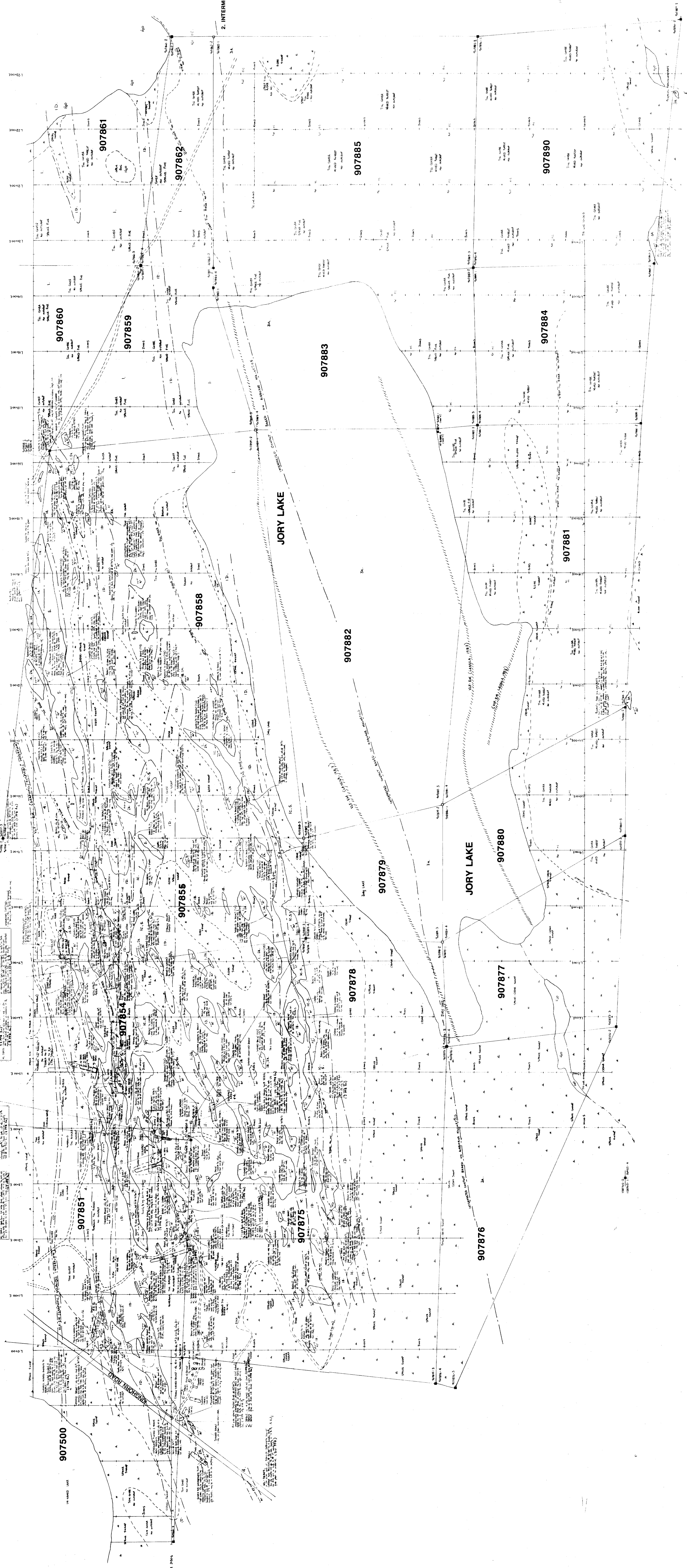
ADDITIONAL INFORMATION (continued)

PROPERTY INFORMATION

PROPERTY INFORMATION (continued)

ADDITIONAL INFORMATION

ADDITIONAL INFORMATION (continued)



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LITHOLOGIES

- 6. LATE (PROTEROZOIC) INTRUSIVE ROCKS
 - 6 DIABASE
- 5. MAFIC INTRUSIVE ROCKS
 - 5 DIORITE, GABBRO
- 4. LITHOSTRUCTURAL/ALTERATION UNIT
 - 4A CHLORITE-SERICITE-Fe CARBONATE SCHIST
 - 4B QUARTZ-CARBONATE-PYRITE-ARSENOPYRITE VEINS
- 3. EPIPLASTIC METASEDIMENTS
 - 3A POLYMICTIC PARACONGLOMERATE
- 2. INTERMEDIATE TO MAFIC TUFFS/LOCALLY DERIVED METASEDIMENTS
 - 2A ANDESITE TO BASALT (TUS) MAY BE INTERSECTED (UNIT 1)
 - 2B QUARTZ-EYE INTERMEDIATE TUFF
 - 2C OXIDE FACIES IRON FORMATION
 - 2D GRAPHIC/PYRITIC INTERFLOW
- 1. INTERMEDIATE TO MAFIC METAVOLCANICS
 - 1A ANDESITE
 - 1B BASALT
 - 1C BASALT TO GABBRO (MAY IN PART BE 5)
 - 1D MAGNETITE BEARING BASALT

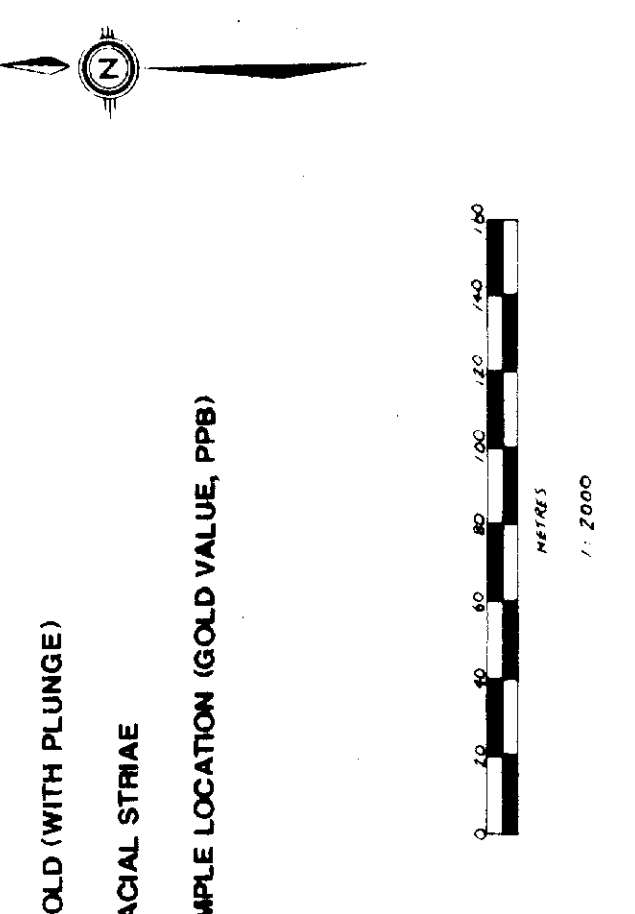
- CLASH (SEE COGNATE SYMBOLS)
- CONTOUR
- EMERGENT CONTACT (SPRING/SINK/SHOULDER)
- RT/TRENCH
- GEOMETRIC BOUNDARY
- GRABEN
- WALL
- CLASH
- PROPERTY LINE (SEE COGNATE SYMBOLS)
- MINOR (SEE COGNATE SYMBOLS)
- MAJOR (SEE COGNATE SYMBOLS)
- 2-3-4 (SEE COGNATE SYMBOLS)
- WATER DITCH
- WATER
- WATER (SEE COGNATE SYMBOLS)

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LITHOLOGIES

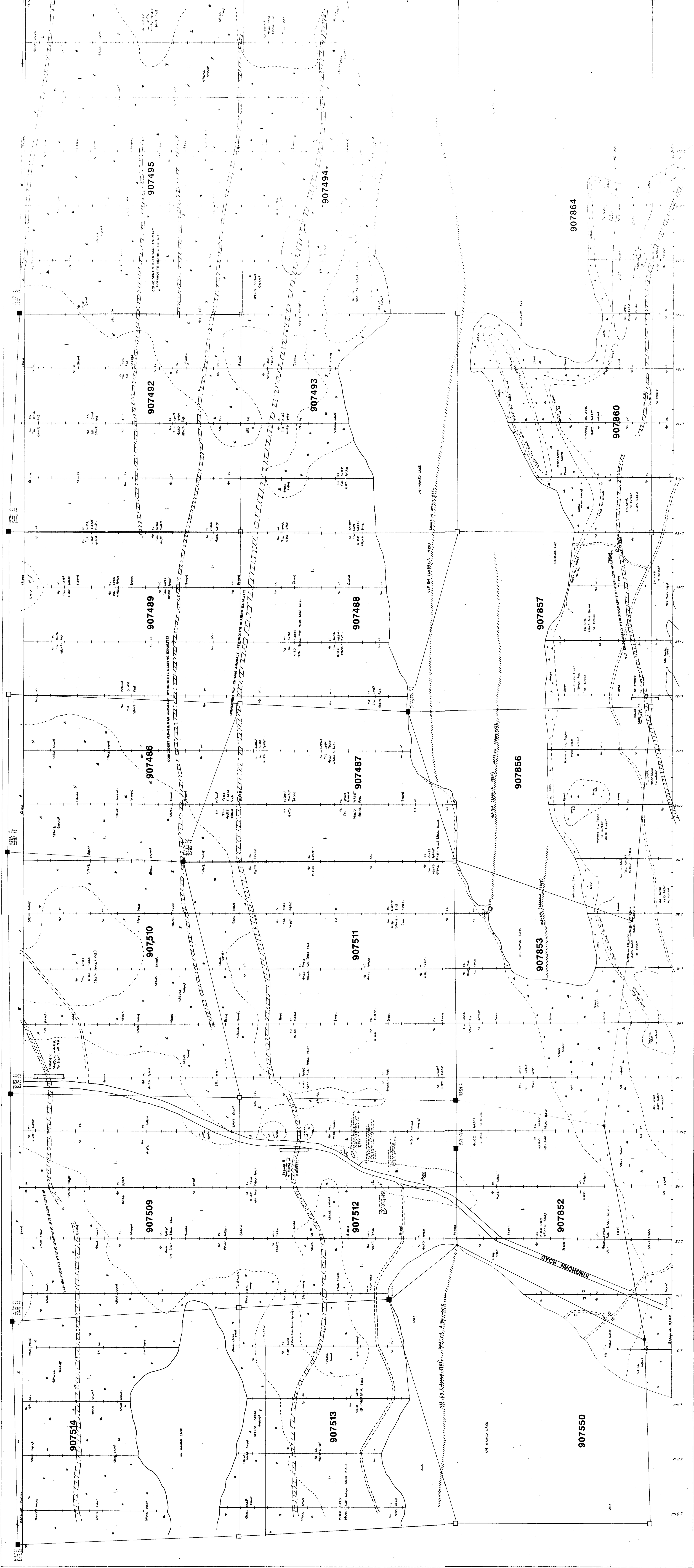
- 6. LATE (PROTEROZOIC) INTRUSIVE ROCKS
 - 6A DIABASE
- 5. MAFIC INTRUSIVE ROCKS
 - 5A DIORITE, GABBRO
- 4. LITHOSTRUCTURAL/ALTERATION UNIT
 - 4A CHLORITE-SERICITE-Fe CARBONATE SCHIST (17 - QUARTZ-CARBONATE-PYRITE-ARSENOPYRITE VEINS)
- 3. EPICLASTIC METASEDIMENTS
 - 3A POLYMYCTIC PARACONGLOMERATE
- 2. INTERMEDIATE TO MAFIC TUFFS/LOCALLY DERIVED METASEDIMENTS
 - 2A ANDESITE TO BASALT (T/S)
 - 2B QUARTZ-EYE INTERMEDIATE TUFF
 - 2C OXIDE FACIES IRON FORMATION
 - 2D GRAPHITIC/PYRITIC INTERFLOW
- 1. INTERMEDIATE TO MAFIC METAVOLCANICS
 - 1A ANDESITE
 - 1B BASALT
 - 1C BASALT TO GABBRO (MAY IN PART BE S.)
 - 1D MAGNETITE BEARING BASALT

- CLAMPPOST LOCATED (APPROXIMATE)
- OUTCROP
- GEOLOGIC CONTACT OBSERVED/ASSUMED
- PIT/TRENCH
- GEOMORPHIC BOUNDARY
- ROAD TRAIL
- SWAMP
- CREEK
- SCHISTOSITY (VERTICAL/INCLINED)
- BEDDING (VERTICAL/INCLINED)
- LINERATOR (WITH PLUNGE)
- S FOLD (WITH PLUNGE)
- Z FOLD (WITH PLUNGE)
- GLACIAL STRIKE
- SAMPLE LOCATION (GOLD VALUE, PPM)



HOME STAKE
MINERAL DEVELOPMENT COMPANY
MISSING LINK
PROPERTY 2113579
GEOLOGY 2113579
(CENTRAL SHEET)

DRAWN BY: JUNE, 1990
 DATE: JUNE, 1990
 FILE CODE: MAP 2
 NUMBER: MTR45B/14

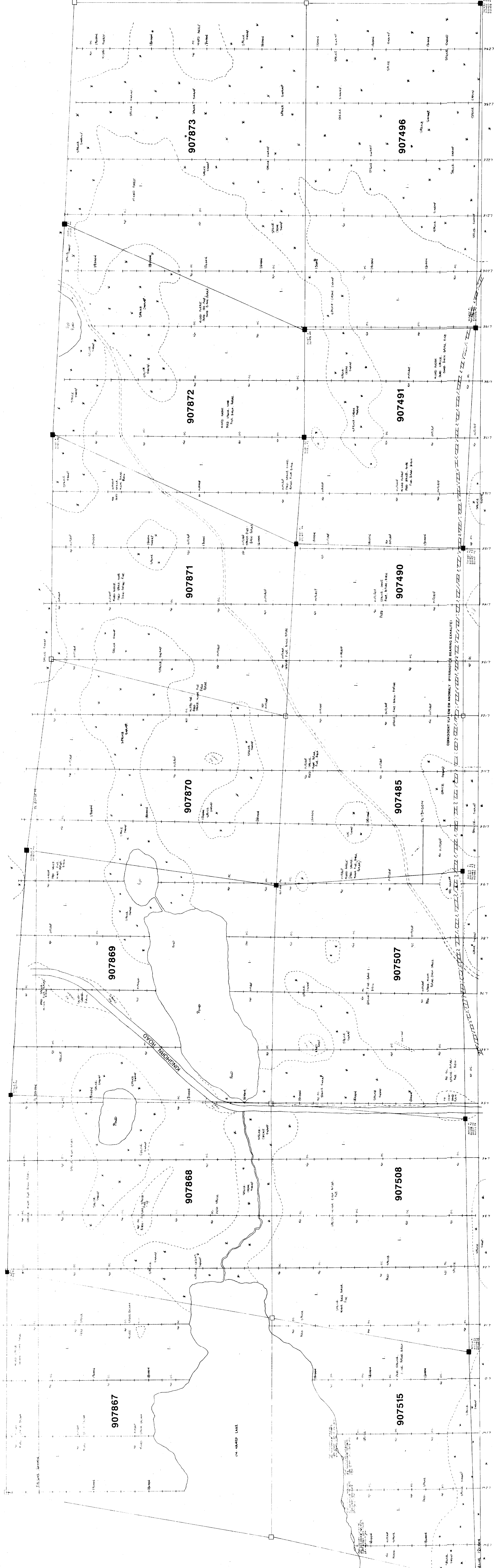


LITHOLOGIES

- 6. LATE (PROTEROZOIC) INTRUSIVE ROCKS
 - 6A DIABASE
- 5. MAFIC INTRUSIVE ROCKS
 - 5A DORRITE, GABBRO
- 4. LITHOSTRUCTURAL ALTERATION UNIT
 - 4A CHLORITE-SERICITE-EPICARBONATE SCHIST
 - 4B QUARTZ-CARBONATE-PYRITE-ARSENOPYRITE VEINS
- 3. EPICLASTIC METASEDIMENTS
 - 3A POLYMETIC PARACONGLOMERATE
- 2. INTERMEDIATE TO MAFIC TUFFS/LOCALLY DERIVED METASEDIMENTS
 - 2A INTERMEDIATE TO MAFIC TUFFS
 - 2B QUARTZ TO INTERMEDIATE TUFF
 - 2C QUARTZ FACIES IRON FORMATION
 - 2D GRAPHITIC PYRITIC INTERFLOW
- 1. INTERMEDIATE TO MAFIC METAVOLCANICS
 - 1A ANDESITE
 - 1B BASALT
 - 1C BASALT TO GABBRO (MAY IN PART BE 5)
 - 1D MAGNETITE BEARING BASALT

- CLIMBPOST LOCATED APPROXIMATELY
- OUTCROP
- GEOLOGIC CONTACT OBSERVED ASSUMED
- PIT TRENCH
- GEOMORPHIC BOUNDARY
- NONMETAFACIAL SWAMP
- CREEK
- SCHISTOSITY VERTICAL/INCLINED
- SCHISTOSITY VERTICAL/INCLINED
- BEDDING VERTICAL/INCLINED
- LINEATION (WITH PLUNGE)
- FOLD (WITH PLUNGE)
- FOLD (WITH PLUNGE)
- FOLD (WITH PLUNGE)
- SAMPLE LOCATION (GOLD VALUE, PHOSPHORUS)

HOMESTAKE MINERAL DEVELOPMENT COMPANY
MISSING LINK PROPERTY GEOLOGY (NORTH SHEET)
 DRAWN BY: JUNE 1990
 FILE CODE: MAR 3
 NTS426714



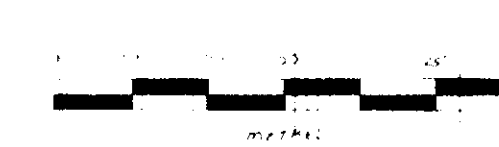
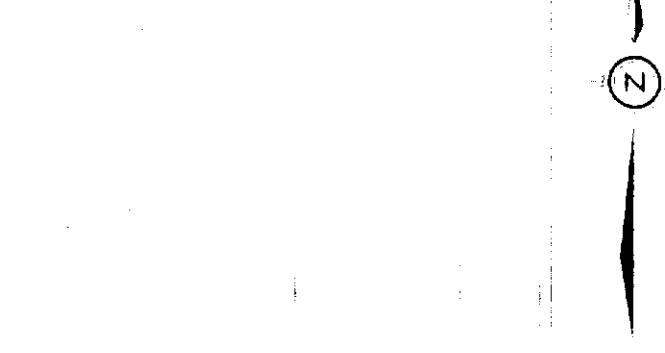
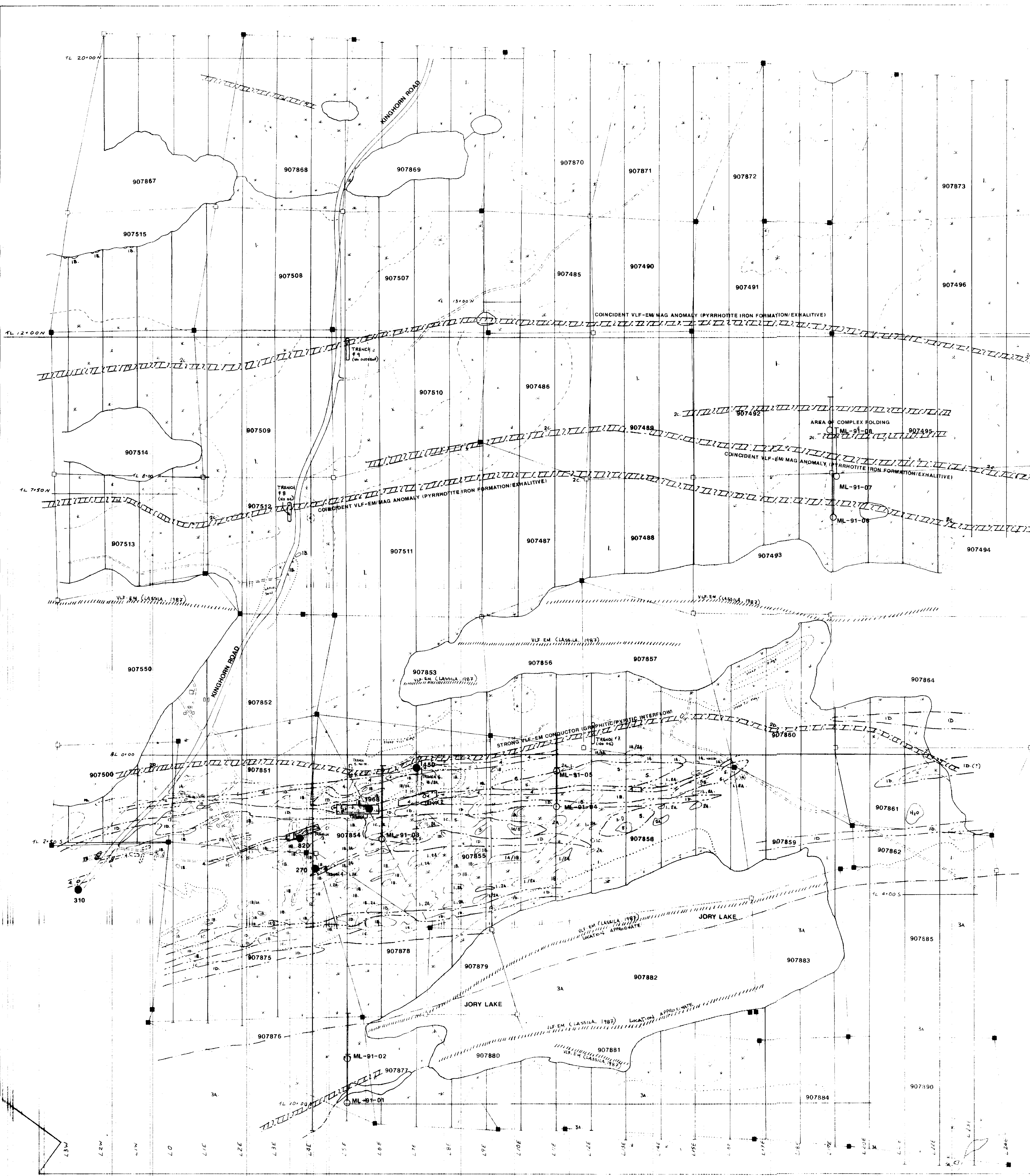
LEGEND

LITHOLOGIES

- 6. LATE (PROTEROZOIC) INTRUSIVE ROCKS
 - 6 DIABASE
- 5. MAFIC INTRUSIVE ROCKS
 - 5 DIORITE, GABBRO
- 4. LITHOSTRUCTURAL / ALTERATION UNIT
 - 4A CHLORITE-SERICITE-FE CARBONATE SCHIST (+/- QUARTZ-CARBONATE-PYRITE-ARSENOPYRITE VEINS)
- 3. EPICLASTIC METASEDIMENTS
 - 3A POLYMICITIC PARACONGLOMERATE
- 2. INTERMEDIATE TO MAFIC TUFFS / LOCALLY DERIVED METASEDIMENTS
 - 2A ANDESITE TO BASALT (T/S)
 - 2B QUARTZ-EYE INTERMEDIATE TUFF
 - 2C OXIDE FACIES IRON FORMATION
 - 2D GRAPHITIC/PYRITIC INTERFLOW
- 1. INTERMEDIATE TO MAFIC METAVOLCANICS
 - 1A ANDESITE
 - 1B BASALT
 - 1C BASALT TO GABBRO (MAY IN PART BE 5)
 - 1D MAGNETITE BEARING BASALT

SYMBOLS

- □ CLAIMPOST (LOCATED/APPROXIMATED)
- OUTCROP
- - - GEOLOGICAL CONTACT (OBSERVED/ASSUMED)
- TRENCH
- SWAMP
- TILL RIDGE
- ROAD / TRAIL
- SCHISTOCITY
- BEDDING
- LINEATION
- S FOLD
- Z FOLD
- GALCIAL STRIAE
- ANOMALOUS SAMPLE LOCATION (GOLD VALUES IN PPB)
- 1991 PROPOSED DRILL HOLE

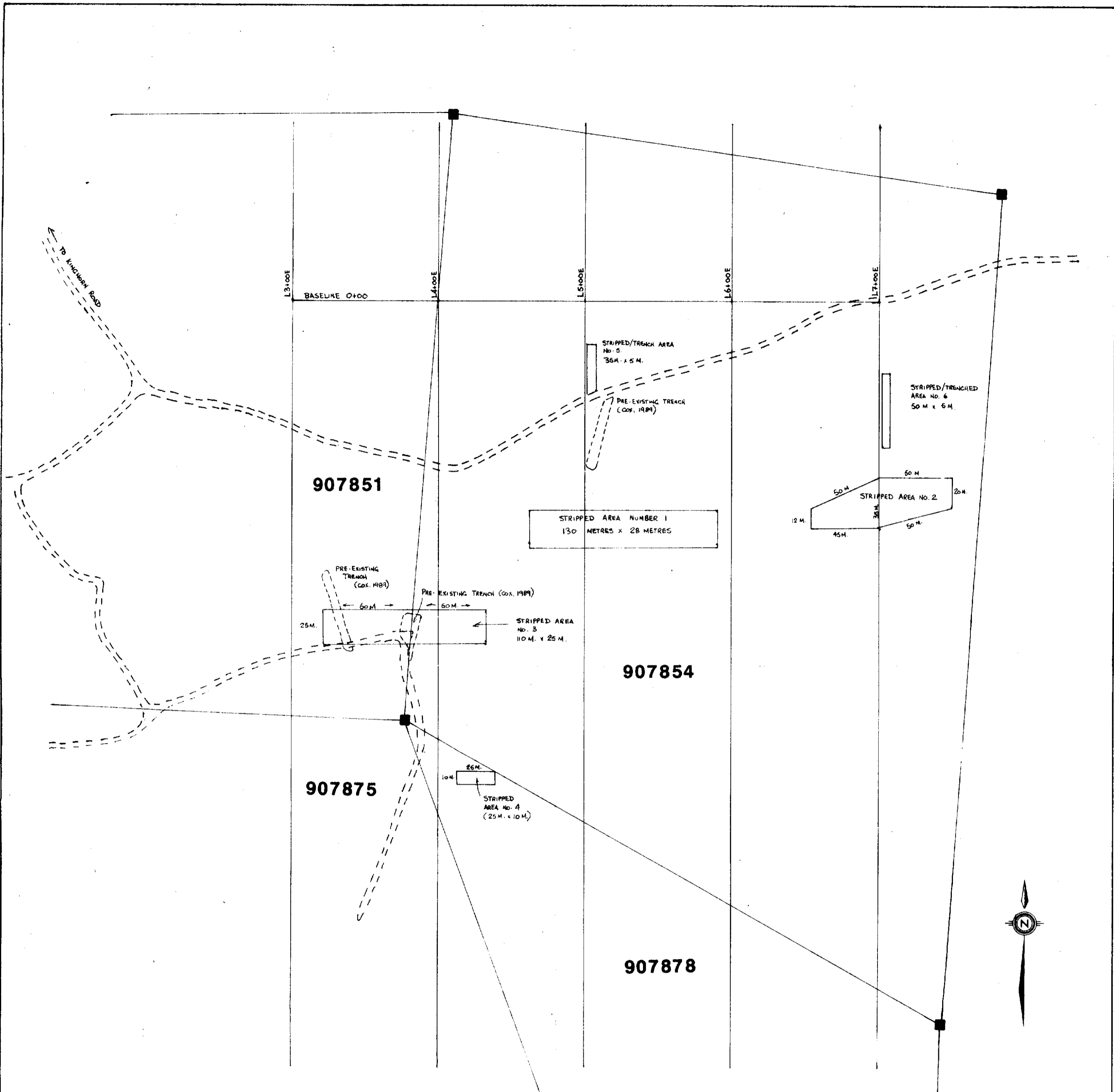


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HOMESTAKE MINERAL DEVELOPMENT COMPANY
MISSING LINK PROPERTY
GEOLOGY - GEOPHYSICS - GEOCHEMISTRY
COMPILED

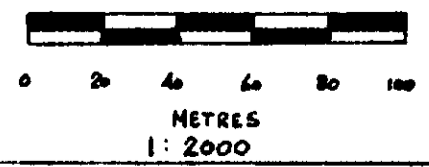
DRAWN D.MCI SL	DATE AUG 90	FILE CODE NTS 42E 11	MAP 1
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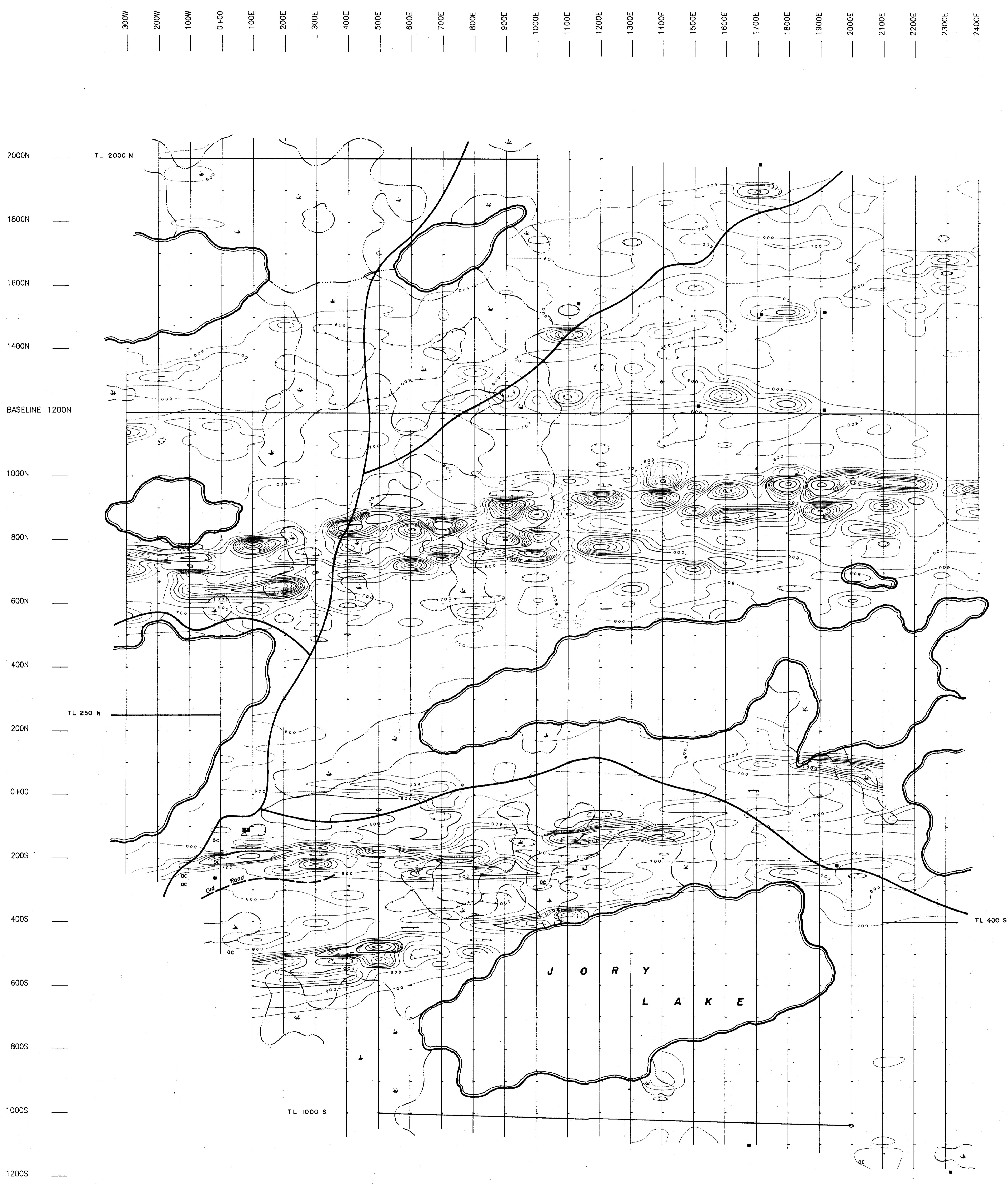


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HOMESTAKE MINERAL DEVELOPMENT COMPANY			
MISSING LINK PROPERTY LOCATION MAP STRIPPED AREAS 1 - 6			
DRAWN D. MCIVOR	DATE AUGUST, 1980	FILE CODE NTS 42E 14	MAP 7
Revised _____			



42E145W004 2.13579 LAPIERRE LAKE



1:50000 Scale Map of the Northwest Territory, 1960, as amended, showing the location of the Homestake Mine in the Northwest Territory.

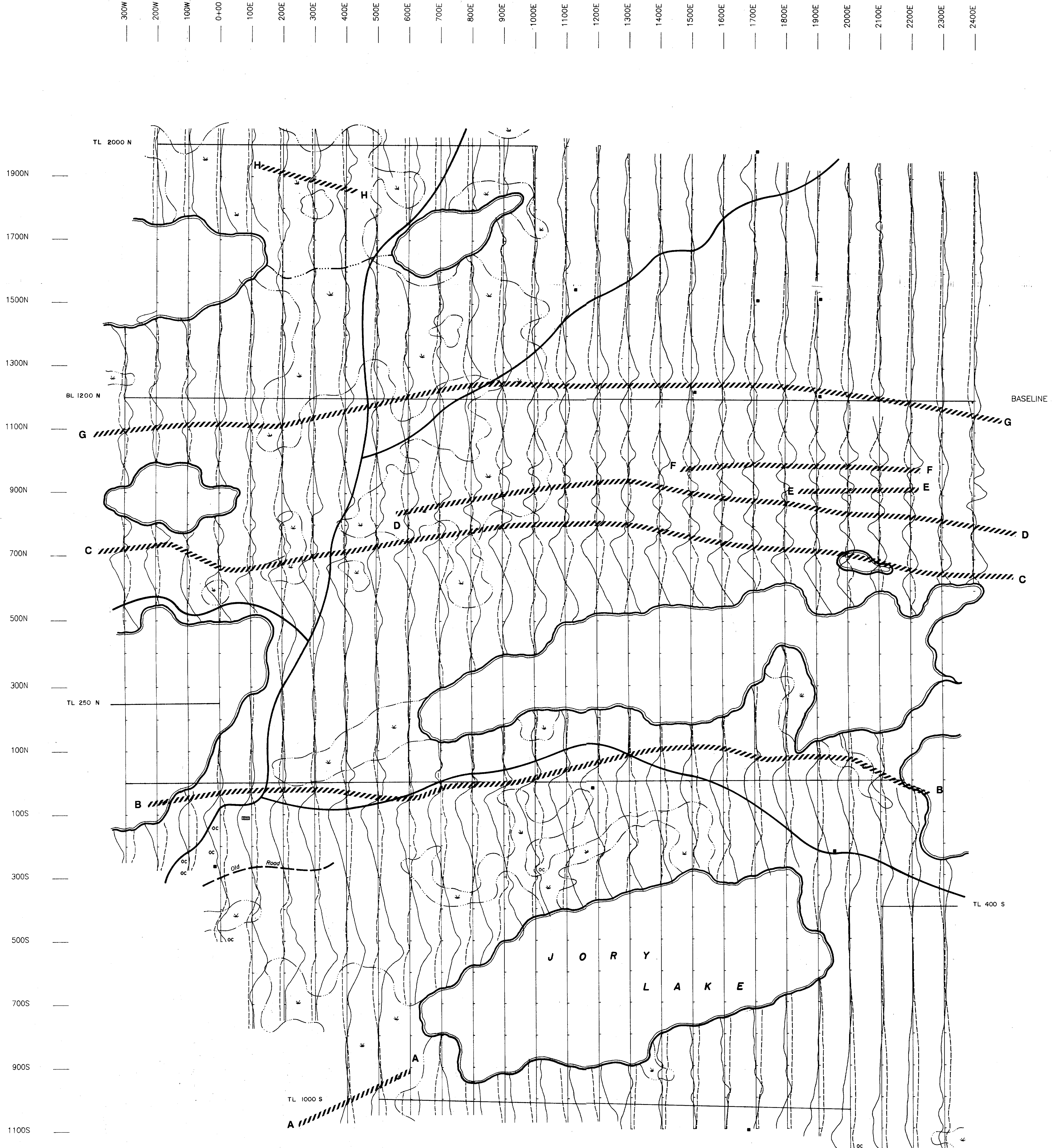
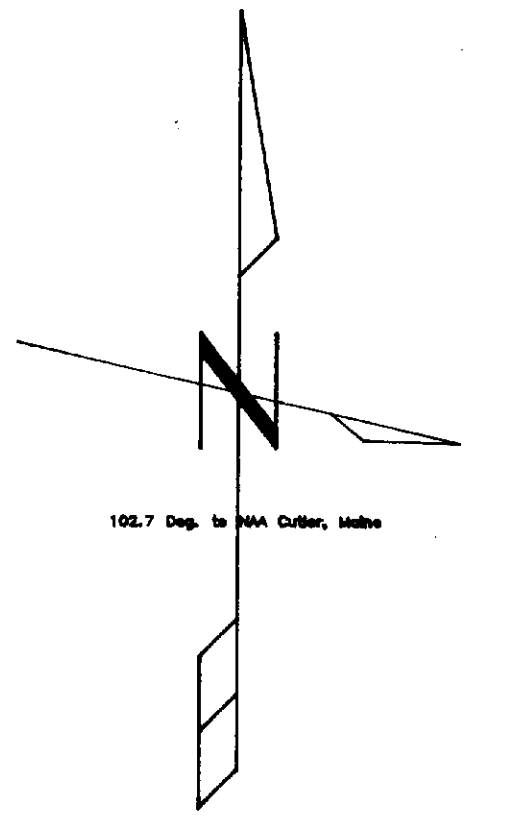
Instrument : OMNI IV
 Field : TOTAL
 Datum : 58000.0 m
 Contour Interval : 100 m
 Conductor Axis :

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HOMESTAKE MINERALS CO.

MAP 5
MAGNETOMETER SURVEY
 PROJECT: MISSING LINK PROJECT # : 5608
 BASELINE AZIMUTH : 90 Deg.
 SCALE = 1 : 5000 DATE : 6/ 4/90
 SURVEY BY : NWC NTS : 42 E/14
NORTHWEST GEOPHYSICS LTD.





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HOMESTAKE MINERALS CO.

VLF-EM SURVEY

PROJECT : MISSING LINK PROJECT # : 5608
 BASELINE AZIMUTH : 90 Deg.

SCALE = 1: 5000 DATE : 6/ 5/90
 SURVEY BY : NWG NTS : 42 E/14
 FREQ.: 24.0 KHz.

NORTHWEST GEOPHYSICS LTD.

MAP 4

Instrument : OMI PLUS
 Vertical Scale Inphase/Quad : 1 cm = 50.0%
 Tx Location : NAA Outier, Maine
 Contour Interval :
 In-phase :
 Quadrature :
 100m 200m 300m 400m



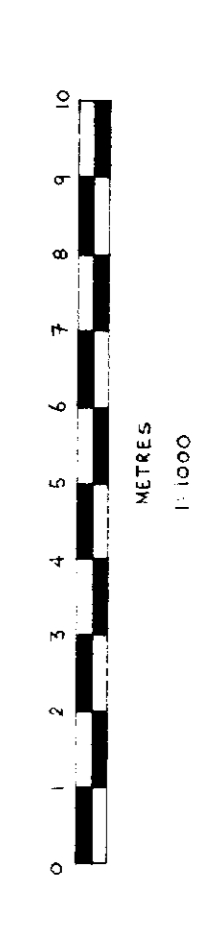


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MINERAL DEVELOPMENT COMPANY

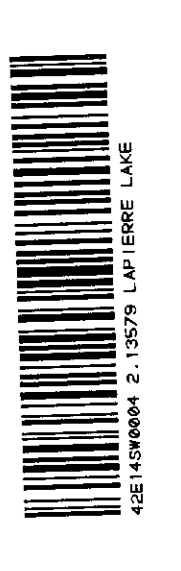
MISSING LINK PROPERTY
STRIPPED AREA NUMBER 1
DETAILED GEOLOGY
SAMPLE LOCATIONS
GOLD GEOCHEMISTRY

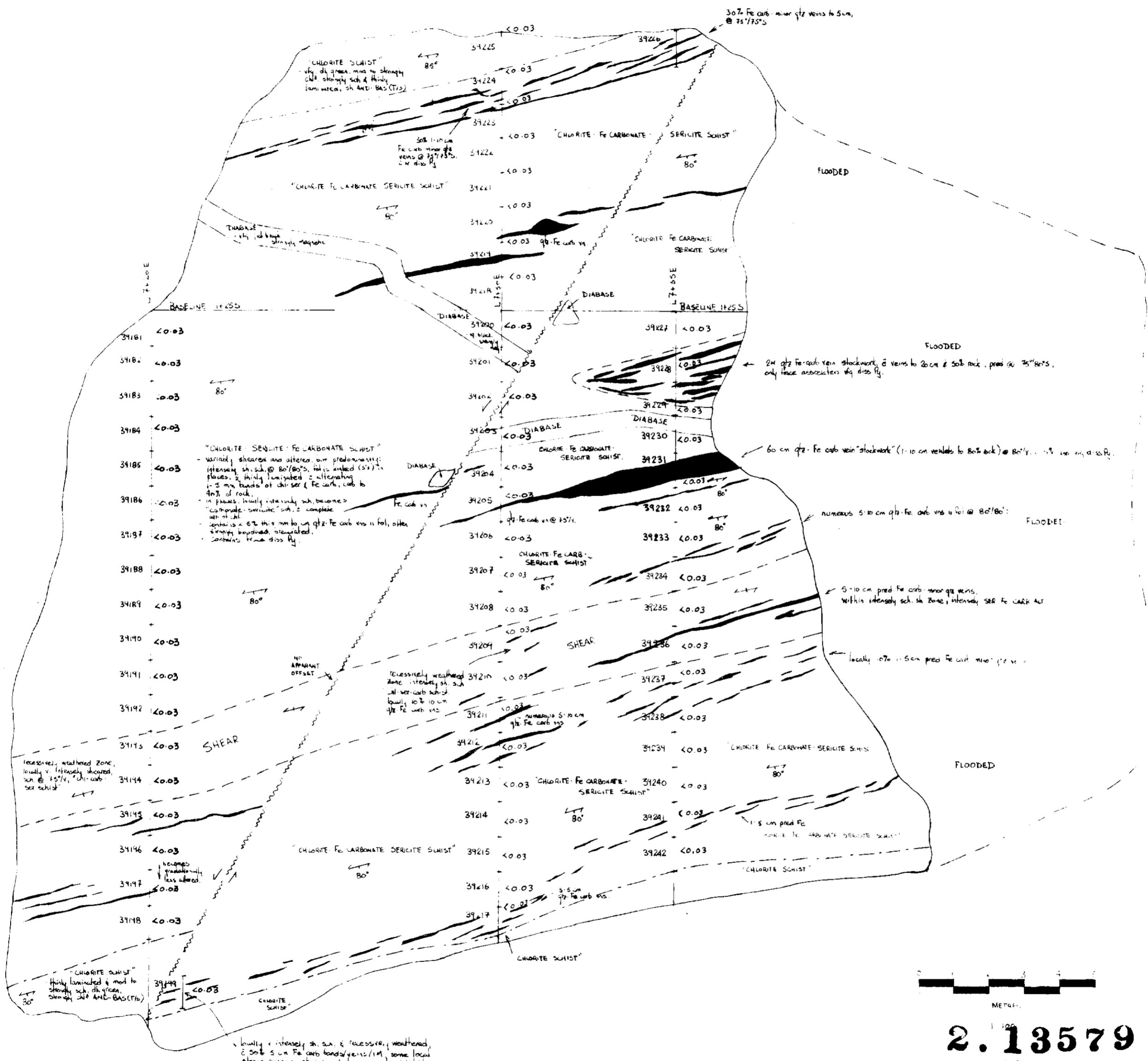
DRAWN BY	DATE	FILE CODE
D. McEVOR	JULY 90	NTS-42E 14
REVISED		MAP 11



ALL SAMPLES ARE CHANNELS, UNLESS OTHERWISE INDICATED
SEE MAP 1 FOR GEOLOGICAL LEGEND

ALL ASSAY VALUES ARE GRAMS PER TONNE





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300 FOR GEOLOGICAL LEGEND, SEE MAP 1
 ALL SAMPLES ARE CHANNELS, UNLESS OTHERWISE INDICATED
 ALL ASSAY VALUES ARE GRAMS PER TONNE

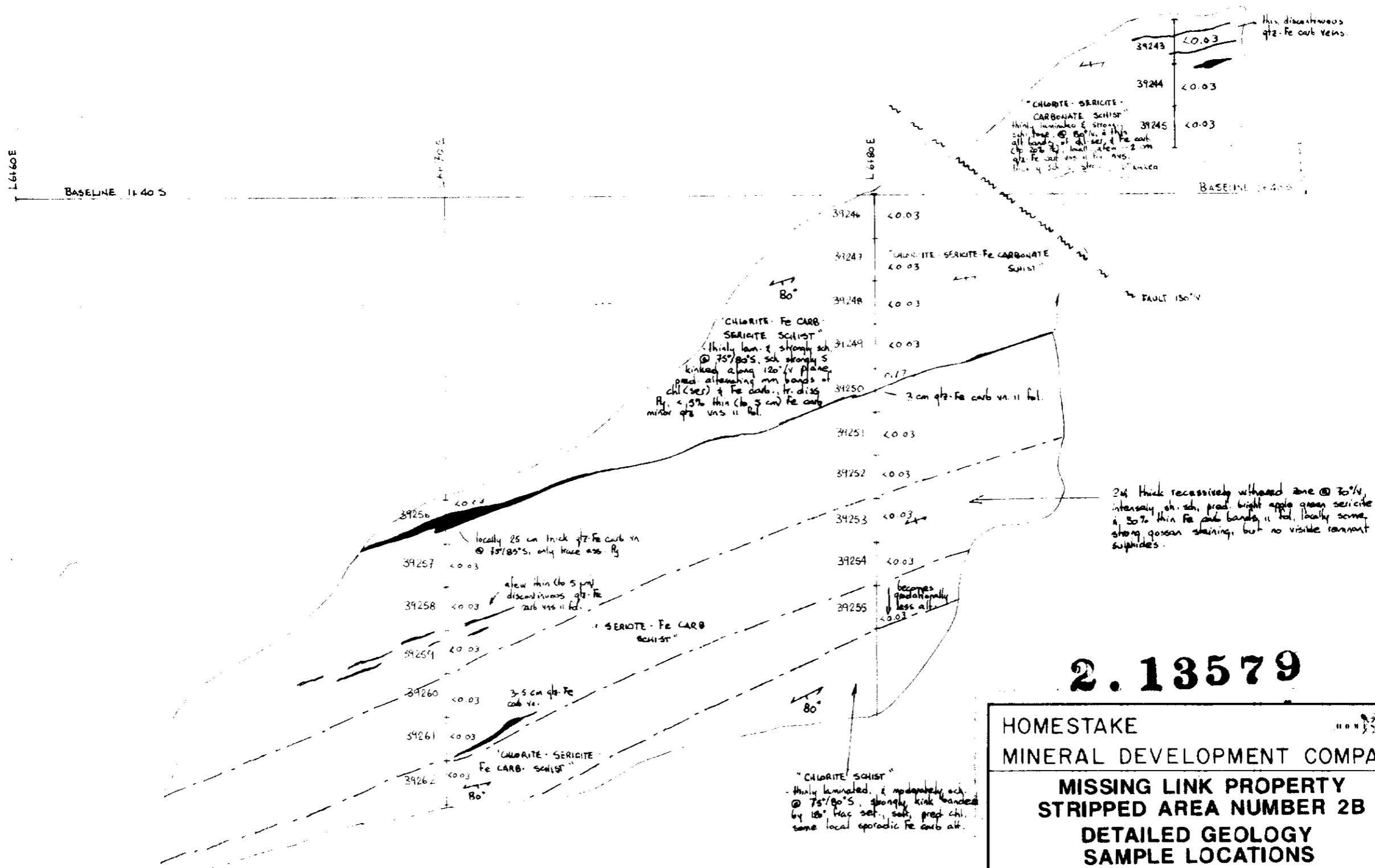
HOMESTAKE MINERAL DEVELOPMENT COMPANY			
MISSING LINK PROPERTY STRIPPED AREA NUMBER 2A			
DETAILED GEOLOGY SAMPLE LOCATIONS GOLD GEOCHEMISTRY			
DRAWN D. MCIVOR	DATE JULY 90	FILE CODE NTS:42E 14	MAY 92
Revised			



FOR GEOLOGICAL LEGEND, SEE MAP 1

ALL SAMPLES ARE CHANNELS UNLESS OTHERWISE INDICATED

ALL ASSAY VALUES ARE GRAMS PER TONNE

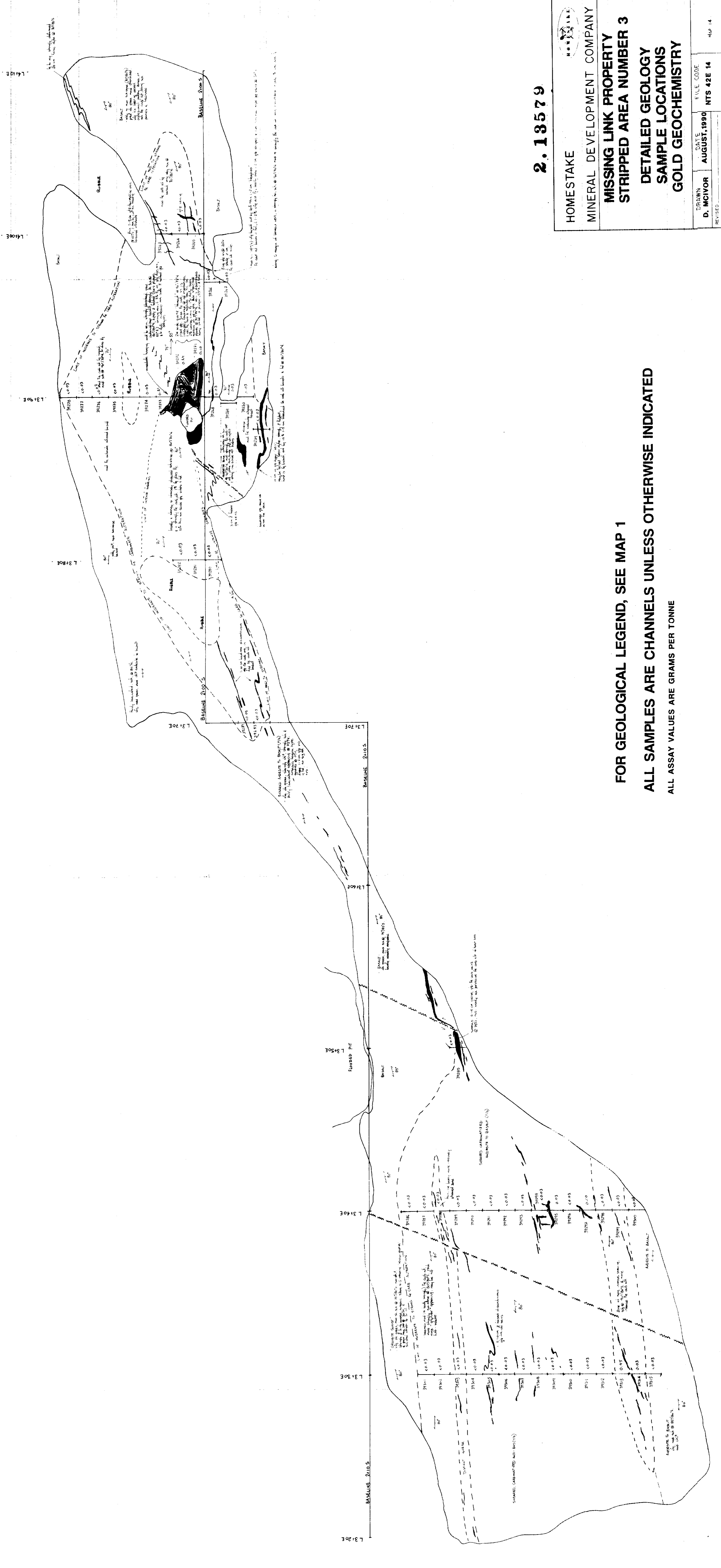


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HOMESTAKE		MINERAL DEVELOPMENT COMPANY	
MISSING LINK PROPERTY STRIPPED AREA NUMBER 2B DETAILED GEOLOGY SAMPLE LOCATIONS GOLD GEOCHEMISTRY			
DRAWN D.MCIVOR	DATE AUGUST 1990	FILE CODE NTS 42E 14	MAP 13
Revised _____			



42E14S0004 2.13579 LAPIERRE LAKE



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HOMESTAKE
 MINERAL DEVELOPMENT COMPANY
MISSING LINK PROPERTY
STRIPPED AREA NUMBER 3
DETAILED GEOLOGY
SAMPLE LOCATIONS
GOLD GEOCHEMISTRY

DRAWN D. MCVIOR	DATE AUGUST, 1990	FILE CODE NTS 42E 14
REVISED		42E 14

FOR GEOLOGICAL LEGEND, SEE MAP 1
ALL SAMPLES ARE CHANNELS UNLESS OTHERWISE INDICATED
ALL ASSAY VALUES ARE GRAMS PER TONNE

